THE INTERNATIONAL JOURNAL OF PSYCHO-ANALYSIS

Vol. XXXVIII 1957 Part 5

THE EROTIC INSTINCTS—A CONTRIBUTION TO THE STUDY OF INSTINCTS

By

MORTIMER OSTOW, M.D., MED.SC.D., NEW YORK

In 1905 Freud, in *Three Essays on the Theory of Sexuality*, gave a definitive statement of the theory of the erotic instincts. In his initial statement, Freud attempted to limit his presentation, and the formulation of theory, to the findings of the psycho-analytic method and to the assumptions justified by these findings. Freud's observations and hypotheses have stood the test of time, and there is no reason at present to continue to avoid an integration of the psycho-analytic theory of the erotic instincts with the data of current ethological research. It is the purpose of this paper to attempt such an integration by restating the theory as a fundamental biological theory, using the data of ethology as well as psycho-analysis, and providing reasonable constructions where data are lacking. The subject of the death instincts will not be treated in this presentation. It need hardly be added that this is an attempt neither to dilute nor to justify psycho-analytic theory, but rather to amplify it.

A. DRIVING FORCES

The definition of the word instinct is itself the subject of controversy. It is especially difficult to find a definition which would apply equally well to humans and to lower animals. In the lower animals there are individual behaviour patterns and groups of behaviour patterns, each of which appears only in the service of a specific purpose. It is thus possible to assign such a behaviour pattern to a single instinct, such as the reproductive instinct, the nutritive instinct, and so forth. (Actually, among some of the higher vertebrates, instinctual techniques begin to lose some of their exquisite specificity. For example, in the herring gull, Tinbergen describes head-tossing and food begging in both courtship and the process of feeding the young.) In man, on the other hand, there are relatively few behaviour patterns which are not used to serve more than one, and often many, purposes. Vocalization and speech, for example, may appear in the infant-mother relation, in childhood play and learning activities, in adult sexual situations, in nutritive, aggressive, and intellectual functions. In human beings, therefore, it is impossible to define an instinct uniquely in terms of any group of behaviour patterns. Freud therefore prefers to deal with objects, aims, and sources recognizable in the operation of the sexual instincts as the significant variables.

'By an "instinct" is provisionally to be understood the psychic representative of an endosomatic source of stimuli which are in continual flux, as contrasted with the "stimulus" which is set up by single excitations coming from without. The concept of instinct is thus one of those lying on the frontier between the mental and the physical. The simplest and likeliest assumption as to the nature of instincts would seem to be that in itself an instinct is without quality, and, so far as mental life is concerned, is only to be regarded as a certain amount of demand made upon the mind for work. What distinguishes the instincts from one another and endows them with specific qualities is their relation to their somatic sources and to their aims. The source of an instinct is a process of excitation occurring in an organ and the immediate aim of the instinct lies in the removal of this organic stimulus' (9, p. 46).

Tinbergen, in *The Study of Instinct*, states: 'I will tentatively define an instinct as an hierarchically organized nervous mechanism which is susceptible to certain priming, releasing and directing impulses of internal as well as external origin, and which responds to these impulses by coordinated movements that contribute to the maintenance of the individual and the species.'

Both Freud and Tinbergen note that instinctual

behaviour has an internal source and is not necessarily dependent upon an external stimulus for its evocation. I doubt whether Tinbergen had anything in mind beyond the fact that nutritive and reproductive needs appear within the central nervous system as a result of changes within the central nervous system itself, or as a result of maturational, hormonal, or metabolic changes. The appearance of these needs is rhythmic and intermittent in accordance with the intrinsic physiological needs and rhythmic functions of the organism. Freud, however, notes that the stimuli which arise from an ' endosomatic source ' are in ' continual flux '. In other words, in human beings there is a constant pressure of instinctual activity; whatever fluctuations occur are fluctuations in source, aim, or object, but not in intensity. This is a fundamental difference between the *modus operandi* of human and of subhuman instincts. It is analogous to the constant genital sexual activity of the mature human, as opposed to the seasonal reproductive activity of the subhuman animal. How is this constant pressure for instinctual activity in the human sustained? Freud suggested two considerations. The first was that sexual tension, by which I believe he meant the subjective experience of being under the influence of the sexual drive, might be a direct function of the accumulation of semen in the seminal vesicles. While this suggestion has certain attractive features, he recognized that it clearly fails to cover all the facts and could certainly not be considered a complete explanation. His second explanation was that the hormonal products of the sexual endocrine glands ' are taken into the bloodstream and cause particular parts of the central nervous system to be charged with sexual tension.' Here sexual tension must refer to changes occurring within the central nervous system whether or not they are subjectively appreciated. The psychic energy made available by the action of the sexual hormones upon the central nervous system is given the name libido. ' In thus distinguishing between libidinal and other forms of psychic energy, we are giving expression to the presumption that the sexual processes occurring in the organism are distinguished from the nutritive processes by a special chemistry.'

Following the first publication of *Three Essays on the Theory of Sexuality* in 1905, many observations and experimental data on the activation of the sexual instincts have become available. The study of the striking effects of the hormones, especially those derived from the sexual endocrine glands, which was so promising at the turn of the century, has continued with great enthusiasm, stimulated, at least in some quarters, by the hope that it might be possible to explain the normal and pathological patterns of sexual behaviour on any but a psychic basis. The material is quite interesting to the psycho-analyst, and it is available in well-organized form in Frank Beach's book *Hormones and Behavior*. Reviewing the material at this point would contribute little to the exposition of the central theme of this presentation. Suffice it to say that among humans after the age of puberty, there is no reason to attribute fluctuations in the intensity or variations in the direction of the sexual drive to alterations in the hormonal content of the blood. In general, says Beach, it is the stereotyped, fixed, primitive components of instinctive behaviour (consummatory techniques, *cf.* below) which we ordinarily think of as inherited, that are most directly associated with endocrine products, while those forms of behaviour which depend upon individual experience are more remotely related. The tacit psycho-analytic assumption that, in the post-pubertal human, the psychic derivatives of the sexual instinctual drives fluctuate primarily in response to psychic forces, has not been shown to require revision.[1, 2]

---

[1] It might be objected that the work of Benedek and Rubenstein demonstrates a dependence of human female psychic function upon hormonal fluctuations. First, final evaluation of the validity of the work waits upon its repetition by others. One source of doubt is the unconvincing nature of the interpretations which are cited in the protocols. Another is the fact that while the analysts were ignorant of the presumptive hormone levels (calculated from vaginal smears), they were, of course, aware of the sequence of the sessions, both during the course of the analysis and in retrospective evaluation. If the same frequency of correct predictions had been obtained on the basis of judgement of the contents of individual sessions, their sequential position being unknown to the predictor, the results would be much more cogent. Nevertheless, the fact that the method has limitations does not necessarily invalidate the conclusions, though it deprives them of crucial significance. Secondly, even assuming validity, it is not Benedek's contention that hormonal concentration exclusively determines psychic content, but that it colours psychic content. In other words, she believes that although endocrine function and psychic function are not connected in a one-to-one relation, some relation can be discerned. She does not deny the separation between the two variables but asserts that the separation is not complete. ' It would be an error, however, to conclude that hormone change or even the change of sexual energy is responsible for all psychic tensions; that basic capacity for love, for motherliness, for activity and constructiveness, or the lack of these qualities, depends wholly upon the hormone regulation. In addition to the fact that the production and effect of sex hormones are influenced by all metabolic processes, there is evidence to prove that these basic attributes of the individual are present before sexual function matures and they do not cease to exist after the decline of hormone regulation. Thus, the processes which we describe in their emotional and physiologic aspects are superficial—like faint ripples on a huge body of water as compared with the constitutional basis of personality.'

[2] There are two purely physiological differences between human female uterine function and that of lower mammals. First, genital bleeding in the human signifies a period of *infertility*, but accompanies *fertility* in the lower mammals. Second, lower mammals do not show a menopausal cessation of reproductive

It has not been possible to ascribe to the endocrines the crucial role of the regulation of instinctual activity, nor is it possible to ascribe to the influence of hormones on muscles and glands their entire effect. A number of observations of spontaneous behaviour that could be ascribed to the effects neither of hormones nor of visceral stimuli of any kind has led to the assumption that the central nervous system itself produces impulses that can function as specific activators of instinctual behaviour. Stimulation of the central nervous system, especially within the hypothalamus and temporal lobes, has been able to evoke clearly recognizable fragments of fairly complex instinctive patterns (MacLean and Delgado, 1953). The conclusion that the central nervous system contains the basic patterns of, and the ability to initiate and regulate, instinctual behaviour is implied in Tinbergen's definition of an instinct, that it is ' an hierarchically organized nervous mechanism.' Both Beach and Tinbergen infer from the data available that hormones act directly upon central nervous mechanisms. ' It is usually postulated that complex behavioural reactions which occur without opportunity for learning, which are executed in the same manner by all members of the species, and which can be shown to be hereditary, are mediated by nervous mechanisms whose structural and functional organization is controlled more by genetic factors than by individual experience. It is certain that the structural and functional characteristics of the various endocrine glands are also genetically controlled. The final result is a set of inherited relationships between the behavioural mechanisms and the glandular products. If such is indeed the case it is not surprising that inherited behavioural mechanisms should be more directly and intimately associated with endocrine products than are other forms of response which arise only as the result of individual experience ' (Beach, 1948). The idea advanced by Freud half a century ago, that hormones act upon the central nervous system, is finding increasing acceptance.

B. PSYCHE AND BRAIN

In essence, both the constant instinctual pressure and the short term, moment to moment, and day to day fluctuations in the pattern of spontaneous behaviour (assuming that all behaviour is essentially instinctually activated) are ascribable to forces playing within the central nervous system. It is a basic assumption of psycho-analysis that in man, both overt behaviour and a significant proportion of the central nervous system processes which determine behaviour give rise to certain representations in the psychic life. The psyche is thus assumed to be a large panel on which these implicit and explicit processes are registered. It was the assumption of pre-analytic psychology that conscious intellectual processes taking place within the psyche determine, or could determine, behaviour completely. Familiarity with the data of psychopathology and, in fact, of almost all behaviour when scrutinized by the light of ps cho-analysis, made this position untenable. With the extension of the psyche to include not only conscious life and intellectual processes but the unconscious as well, the latter characterized by the primary type of process, it became possible to find in the psyche not only the representations of overt behaviour and antecedent psychic events but also the stage upon which the significant forces interact. We assume, in other words, that psychic function includes all conceptual processes which determine behaviour, though we may exclude by definition neuronal processes primary to, but below the level of the concept. In other words, we do not assume that that aspect of behaviour processes which is presented for psychic scrutiny comprehends the totality of those processes, but we do believe, on the basis of the collective experience of psycho-analytic therapy, that the central nervous system processes are controlled, probably completely, by the forces to which their psychic aspects are exposed. To the psycho-analyst, then, the psyche is a region in which the behavioural processes of the central nervous system are reflected, determined, and controlled,

---

function as do humans (Burns, 1953). These two differences suggest that human female cyclicity is fundamentally different from that of lower mammals. The nature of the difference, it seems to me, is suggested by the following passage from Burns: ' To insure pregnancy there are many variations of the sexual heat period among the mammalian species. If pregnancy does not result, the female may after her heat have a few days of inactivity during which her reproductive organs resume their normal condition; then she will come into heat again. With some mammals this period may be repeated recurrently, a fourth, a sixth and even a tenth time, until the close of the breeding season, or it may go on for years as it does in the human female.' I am tempted to infer that the entire period of human fertility, from puberty to menopause, is homologous to a single breeding season in the lower mammals. The human menstrual cycle corresponds not to the seasonal cycle of the lower mammals, but to the resurgence of *heat during a single breeding season.* The human menopause would then be homologous to the termination of the breeding season of the lower mammal. If this hypothesis is correct, it means that a physiologic epoch which in the lower mammal occupies a fraction of a year, in the human is protracted to three or four decades, the major portion of the adult period. Such protraction in the human of a considerably briefer epoch in the lower mammal is the operating principle in the phenomenon of ' retardation ' of ontogenetic development and fetalization described by Bolk. René Spitz finds this suggestion consistent with Freud's supposition that the dichronic course of sexual development in the human was a phylogenetic response to the suppression of fluctuation in temperature and duration of periods of light caused by glaciation. He calls attention to the profound alterations of menstrual rhythm attendant upon abrupt passage from one climatic zone to another.

although it does not contain the total reality of these processes. Freud stated in *An Outline of Psycho-Analysis* that ' the instincts . . . originate in the somatic organization and . . . find their first mental expression in the id in forms unknown to us.' In a second chapter he added, ' they represent the somatic demands upon mental life.'

It is difficult to find a satisfactory analogy. At the present time there is a growing tendency to regulate the many separate components in large complex industrial manufacturing processes by means of electronic computing devices. Each significant variable at every point in the manufacturing process, such as the amount of each raw material, temperatures and pressures in storage and reaction chambers, concentrations of reagents, the availability of power, and so on, is measured and coded electrically and the data are then transmitted to this computing device. In the computing device the constellation of data is handled in a set fashion and the changes in the variables required for most efficient operation are computed. These alterations, in coded form, are then returned to the individual components of the manufacturing apparatus and there the proper adjustments are made. Now we may compare the actual components of the manufacturing apparatus to the anatomic substrate, the actual neural apparatus determining behaviour. The psychic apparatus is analogous to the computing apparatus mentioned above. In the psychic apparatus, as in the computing apparatus, all the data available are handled in a predetermined manner so as to yield the information necessary to perform the appropriate regulation required for most efficient achievement of the goals built into the computing apparatus. These regulatory data are then conveyed back to the neural processes as to the manufacturing apparatus, so that the proper organic changes take place in the central nervous system which will result in the execution of the appropriate behavioural operations. There is essential physical reality to the neural processes as there is essential reality to the manufacturing processes. The psychic representations of the neural processes and the electrical reports of the operations of the manufacturing processes both constitute sets of data, the physical reality of which require only trivial expenditure of material and energy. However, it is these psychic and electrical representations respectively which determine the vicissitudes of the physical processes which they represent, even though they are not those physical processes themselves.

C. TIMING AND ACTIVATING FORCES

Let us return to the subject of the origin and energizing of instinctual behaviour and the activation of individual patterns. In the lower animals, this situation seems fairly simple, at least as we know it at present Some patterns of instinctual behaviour are evoked, so to speak, *ad rem*, that is, in response to a specific environmental situation. For example, patterns of escape appear as soon as the animal becomes aware of the presence of a predator. Feeding behaviour appears rhythmically either in response to internal sensory data or in response to spontaneous rhythmic changes in the central nervous system. In most animals the readiness to respond to the usual signals of the opportunity for feeding or copulation, increases with the time which has elapsed since the last feeding or copulation, respectively, within certain limits. It is this fact that makes Tinbergen say ' such an end-response consumes the specific impulses responsible for its activation.' Sexual behaviour (including nest building, migration, fighting) is determined by the procession of the seasons, with the assistance of hormonal regulation, and specific acts are ' released ' by perceptible aspects of potential objects.

What about the maintenance and selection of instinctual behaviour in human beings? Freud said that the source of an instinct ' is a process of excitation occurring in an organ '. At another point he added that ' sexual excitation arises (*a*) as a reproduction of satisfaction experienced in connexion with other organic processes, (*b*) through appropriate peripheral stimulation of erotogenic zones, (*c*) as an expression of certain " instincts " (such as the scopophilic instinct and the instinct of cruelty) of which the origin is not yet completely intelligible.' In this sense he listed among the sources of infantile sexuality mechanical excitations, muscular activity, affective processes, intellectual work. ' It seems that the fullest provisions are made for setting in motion the process of sexual excitation —a process the nature of which has, it must be confessed, become highly obscure to us. The setting in motion of this process is first and foremost provided for in a more or less direct fashion by the excitations of the sensory surfaces—the skin and the sense organs—and, most directly of all, by the operation of stimuli on certain areas known as erotogenic zones. The decisive element in these sources of sexual excitation is no doubt the quality of the stimuli, though the factor of intensity, in the case of pain, is not a matter of complete indifference. But apart from these sources there are present in the organism contrivances which bring it about that in the case of a great number of internal processes sexual excitation arises as a concomitant effect, as soon as the intensity of these processes passes beyond certain quantitative limits. . . . It may well be that nothing of considerable importance can occur in the organism without contributing some component to the excitation of the sexual instinct.'

1. Three Modes of Instinctual Activity

There is a significant difference in pattern between animal and human instinctual behaviour. The daily activity of the mature human consists of three

separate types of behaviour. First, there is the consistent background of daily work which is the individual's contribution to sustenance of himself, his family, and society. Second, there is the pursuit of libidinal relations with love objects. Third, there are those acts performed in response to whatever fortuitous urgent demands the environment visits upon the individual. The third category, the emergency response, shows least difference between man and animal. It is least susceptible to neurotic distortion and may be preserved when neurosis or psychosis has seriously impaired the first two. Just how the emergency reaction is evoked, and how it manages to supersede other behaviour, requires investigation, but I shall pursue it no further here. Now, with respect to the first two categories of behaviour, the human shows two chief differences from animals. The first difference is that in animals, the acquisition and defence of territory, and nest building and family maintenance, the animal activities which most closely resemble the daily work of human beings, are clearly components of the reproductive drive and therefore tend to be performed each in its proper place in the reproductive sequence. (Although one might be tempted to homologize the human activity of earning daily bread with the daily predatory and foraging activity of animals, I believe there is a fundamental difference. Modern breadwinning, in the large majority of the population, employs none of the patterns of food finding activity used by animals, and in fact, by primitive men.) Family sustenance in man is not restricted to a specific point in a reproductive sequence, but is driven at a constant rate, ideally unaffected by fluctuations in intensity and pattern of directly erotic activities. Now this sequential rigidity is a relative one, being more pronounced among the lower vertebrates, less pronounced among the higher vertebrates, and least pronounced, though not completely absent, among human beings. The second difference between animal and human instinctual behaviour is that in the case of the former, the preparatory and consummatory reproductive activities are typically initiated and executed cyclically in response to seasonal changes. This rhythm applies not only to directly genital activities but to family sustenance as well. In man, on the other hand, neither breadwinning nor erotic activities are cyclical. Again this difference is relative rather than absolute. Seasonal timing is more pronounced among females than males, and more among lower than higher vertebrates. Even in man, a residuum of instinctual sensitivity to weather and season is indicated by mood fluctuations in response to climatic and vegetational change, the annual spring tide of suicide, and by the universal affective response to natural and celestial phenomena exemplified in widespread worship of these and incorporation of them in psychotic delusions. These two characteristics of human instinctual behaviour, namely, the relative dissociation of preparatory unconsummated (aim-inhibited) activity or work from erotic activity, and the release of both from seasonal timing, I shall try to elucidate by considering the dynamic forces and the contents of human instincts.

Let me introduce two concepts, the concept of displacement activity as used by the ethologists and the concept of mammalianization introduced by Leonard Sillman.

2. Animal Behaviour and Human Behaviour

Before going further, I should like to make a few remarks about the application of data of animal behaviour to human behaviour. Some limitations are at once apparent. Data from animals can deal only with objectively observed behaviour, while humans yield both observational data and subjective reports. Direct comparison can be made only between the two sets of observational data, and not directly between animal behaviour and human psychic function. Second, one must not be misled by similarities to confuse convergences with true homologies. For example, a whale looks like a fish because many water-dwelling creatures tend to converge in appearance; however, closer examination of structure and function reveals that it is more closely homologous to mammals. In the field of behaviour, one may compare the speech of a man with the speech of a parrot. Yet the speech of a parrot is merely an example of a bird-call, the form of which is determined by mimicry, and, while a bird-call is a means of communication, it lacks the essential elements of consciousness of purpose and voluntary determination of content which characterize speech. On the other hand, the cry of a lonely baby and the whining of the young mammal are probably more closely homologous, since they are similar in having no specific content, are automatically evoked in situations of helpless separation from the protecting parent, and result in the return of the parent to the offspring.

It is also true that a genuine homology may be obscured by a superficial dissimilarity. For example, Lorenz and Tinbergen note that gestures of appeasement or surrender in intraspecies combat may, among birds, consist of presenting the base of the skull or the top of the head to the victor, while among wolves the neck is offered to the victor's jaws. The instinctual acts themselves are different, but study of the circumstances under which the act occurs, as well as the consequences of the act, reveals the homology.

We must not infer that a mechanism which obtains in some species exists in all others. For example, this surrender mechanism does not exist in many species whose physical characteristics, for example, fleeing ability, or solitary living conditions, make it unlikely that combatants will kill each other.

We must not be misled by exceptions to generalizations. It is quite possible that a mechanism which is fairly universal may be discarded by a few species as an evolutionary experiment.

We must not underestimate the distorting and obscuring effects of captivity and domestication. The interpretation of specific reactions may require the invoking of two or more principles simultaneously. Subvertebrate behaviour is considerably less relevant to the human being than vertebrate behaviour.

In general, the use of animal behaviour data in the study of human psychology encounters many pitfalls. At most, the observation of a given mechanism in an animal species suggests that it might be found in man as well if one can determine how to recognize it. The more universally a mechanism occurs, the more likely it is to be found among human beings. The more consistent a mechanism becomes as one ascends the evolutionary scale, the more likely it is that it will obtain in man. At most, animal observations may suggest to us what mechanisms might exist in man; they offer us plausible hypotheses; they do not themselves, without confirmatory observations on human beings, establish any truths of human psychology. Let me illustrate by returning to the instance of the surrender or appeasement gesture mentioned above. Since such a mechanism exists in a number of species, we may legitimately wonder whether it exists in man too. Lorenz suggests that bowing, removing the hat, and presenting arms are examples of human appeasement gestures. It is true that surrender rituals may differ in various cultures, but many show the characteristic of making the vanquished even more vulnerable to the victor. The great prevalence of this principle among human societies strongly supports Lorenz's thesis, even though we must then explain how an instinctual act, which among lower animals is stereotyped, may, among humans, assume any of a number of different forms. We think, in this connexion, of the affect of pity, which serves the function of inhibiting aggression, and we may speculate that this affect is the psychic component of the appeasement mechanism in the victor.

3. Displacement Activity

To present the concept of displacement activity I shall quote a series of passages from Tinbergen. 'It has struck many observers that animals may, under certain circumstances, perform movements which do not belong to the motor pattern of the instinct that is motivated at the moment of observation. For instance, fighting domestic cocks may suddenly pick at the ground, as if they were feeding. Fighting European starlings may vigorously preen their feathers. Courting birds of paradise wipe their bills now and then. Herring gulls, while engaged in deadly combat, may all at once pluck nesting material, etc. In all the observed instances the animal gives the impression of being very strongly motivated. . . . An examination of the conditions under which displacement activities usually occur led to the conclusion that, in all known cases, there is a surplus of motivation, the discharge of which through the normal paths is in some way prevented. The most usual situations are (i) conflict of two strongly activated antagonistic drives; (ii) strong motivation of a drive, usually the sexual drive, together with lack of external stimuli required for the release of the consummatory acts belonging to that drive. . . . A comparative review of displacement activities reveals that they are always innate patterns, known to us from the study of other instincts. Recognition is often difficult because the displacement activity is usually incomplete. This turns upon the intensity of motivation, for with very strong motivation the displacement act may be complete. . . . The remarkable stereotypy of displacement reactions, the fact that they resemble innate motor patterns of other instincts and the fact that they are typical for the species and do not differ from one member to another, suggests that the motivation of an instinct when prevented from discharging through its own motor pattern finds an outlet by discharge through the centre of another instinct. . . . The incompleteness of displacement activities shows that the sideways discharge meets with considerable resistance.' Tinbergen adds that such displacement activities are ritualized and then come to serve the function of signalling. We shall not permit ourselves to be deflected from the main thread of our argument by considering the many parallels between these data and those of human behaviour as seen by the psycho-analyst. We shall note that 'displacement reactions may . . . embark upon an evolutionary development of their own.' We shall also suggest that if one extrapolates signalling activities of the lower animals to speech in the human, then we are at once confronted with the idea that speech may be a displacement activity evoked by the necessity of inhibiting or limiting motor activity, an important tenet of the theory of psycho-analytic treatment. Aside from noting that displacement activities tend to become ritualized and serve a communication function, neither Tinbergen nor Lorenz mentions any consistent function of displacement activities.

4. Mammalianization

We may now proceed to the second of the two concepts mentioned above. In his paper 'The Genesis of Man', Sillman stated that mammalianization, that is, the evolutionary development of the mammal, involved the erotization of the skin surfaces. I shall discuss one implication of this remark. To me it means that the feeding instinct of the infant, the nursing instinct of the mother, and the genital instincts of adults are all elements

of an erotic instinct which is continuously active from birth through reproductive involution. As applied to man, of course, this statement reduces to the assertion of infantile sexuality as it first appeared in the *Three Essays*. However, Sillman's remark draws attention to the fact that the condition is characteristic of the entire mammalian group. His statement seems to indicate that he believes that the new form of infant nutrition devised by mammals is a derivative of their adult sexual instinct. It is also possible that the sexual instinct is new in form, being derived from the feeding instinct. A third possibility is that both infant and adult sexuality are developed together as elements of a fresh instinct or a fresh form of instinctual organization which has the function of subserving all behaviour in which the participation of a second individual is required. I don't know how to decide among these possibilities. (Not only is the device for infant feeding new; there are elements of mammalian genital performance which are unique. Kinsey says that the performance of pelvic movements during coitus is characteristic only of mammals. We may suppose that skin grooming, an instinctual activity performed by parents for infants and performed also as part of adult sexual foreplay in mammals, including man, is a component of this generalized erotic instinct. Since it is a cleaning and arranging procedure, it probably comprises one aspect at least of those activities subsumed in psycho-analytic theory under the category of anal behaviour.) In any case, the essence of mammalianization consists of reorganizing instinctual behaviour so that all the activities mentioned above represent individual aspects respectively of a single generalized erotic instinct rather than constituting a number of separate independent instincts. Lorenz (1954), for example, traces the fidelity of the male wolf to the pack leader and his affection for members of the pack, as well as the subordination of the adult female to the male, back to the affection and loyalty of the immature wolf to its parent. Moreover, he derives the fidelity of the wolf dog to its master both from its filial attitude toward its parent and its social ties to its pack associates and pack leader. He is clearly describing the same phenomenon which we, in analytic terminology, consider to be transference of infantile erotic relations to adult love objects. What physiological changes are necessary to effect mammalianization are not easy to imagine. However, the fact that in displacement activities among submammalian vertebrates, fragments of behaviour from one instinct may appear during the execution of behaviour under the influence of another, suggests that relatively little reshuffling is needed to comprehend all instinctual behaviour in which another individual of the same species participates, under a single, generalized, erotic instinct. For example, in the herring gull, food begging and head tossing, primarily a fragment of the feeding instinct of the young, appears in adult courtship and coital behaviour. Tinbergen speculates that it is possible that ' being fed satisfies the same drive as copulation '. Analysts would describe this phenomenon as the use of pregenital modalities in coital foreplay. (I am not considering predatory and escape instincts.)

5. Displacement Activity and Psychic Function [3]

a. Instinctual Maturation and Primal Repression

I should like to propose that in man, a further reorganization of the instincts took place with the aid of the displacement principle, namely, each subsequent pattern of instinctual behaviour in human development is facilitated by inhibition of its immediate predecessor; in other words, each subsequent pattern is a displacement activity with respect to its predecessor. Let us suppose that gratification of the erotic instinct proceeds by the series of patterns A, B, C, D, etc. This series is chronological in the sense that the earliest mode of gratification is A. At a given point in development, either the spontaneous appearance of libidinal desire or the external availability of the object will result in interaction of subject and object by method B rather than A. It is the substance of my proposal that the shift in pattern A to B is occasioned by the process of instinctual displacement described above. That is, with respect to A, B may be considered a displacement activity. At a subsequent point in development, erotic gratification will be effected by neither A nor B but by modality C. In other words, a second displacement has occurred. In general, the process of development in the human implies that the mode of erotic gratification shifts from time to time to the next in the series—each shift being an instance of instinctual displacement, in the sense that the succeeding pattern is activated by inhibition of its predecessor.

Such a theory implies that there must be some carry-over in tendency from displaced to displacing activity. Tinbergen notes this carry-over in intent in his studies on the herring gull. For example, in territorial fighting, threat gestures may suddenly be replaced by vigorous grass pulling. The grass pulling is basically an act belonging to the instinct of nest building, but the violence with which it is performed betrays its belligerent tendency. ' The conclusion therefore is that the thwarted fighting urge, or the combination of thwarted fighting urge and thwarted flight, find an outlet partly through displacement nest building and partly through true fighting activities, the latter being superimposed on the displacement activities, and directed not at the potentially dangerous opponent but at the

[3] The word displacement in this presentation will have only the ethological significance given above, and not its metapsychological significance except where the latter is clearly indicated.

harmless nest material'—in other words, in the instinctual shift, tendency is retained though technique and object are replaced.

To make the step from instinctual drive, which we have to this point considered phenomenologically, to the content of human behaviour, we have to spell out the relation between the two. In my opinion, this can be done in the following way. The activation of an instinctual drive means that within the psyche a corresponding wish or group of wishes is activated. This primitive wish I consider the basic unit of psychic motivation in the sense that all psychic motivation is derived from such wishes taken either singly or in a group. When the individual permits himself to imagine that the wish is approaching gratification, he is indulging a fantasy. Such fantasies use personal or vicarious experience as raw material, and in their more developed form include defensive as well as expressive elements.

We may now illustrate our thesis by referring to the well-known series of sexual aims in psychic development. The series consists, of course, of the following elements: oral, anal, and phallic, followed during the period of latency by inhibition of aims and then, in puberty, by genital aims. Now it is my suggestion that the interest in anal aims replaces the interest in oral aims essentially because oral aims are inhibited. I should add that when I say that oral aims are replaced I mean only that they are replaced as a mode of libidinal gratification—as a mode of relating to an object—while the mouth continues its nutritive and expressive functions. Could the shift from oral to anal aims not be attributed merely to maturation of the central nervous system by means of which voluntary control of the anal apparatus is achieved? Certainly this maturation of the central nervous system is required before such a shift can occur, but I doubt whether the mere availability of new patterns is sufficient to cause them to supersede older patterns. I believe that the thwarting of the older pattern is required for the newer one to be activated. It might also be objected that this chronological and causal sequence cannot be controlling, since it is a matter of common knowledge that the phases of development overlap extensively without clear demarcation. I do not consider this point a serious objection. It is merely necessary to make it clear that the statement 'Pattern A must be inhibited before pattern B can be activated', is a dynamic rather than a chronologic relation. More rigorously, it should read, 'Pattern B is activated only to the extent that pattern A is inhibited'. Thus if interest in oral aims is only partly or intermittently inhibited, then interest in anal aims is *pari passu* partly or intermittently activated. What is true of the transition from oral to anal aims is equally true of the transition from anal to phallic, and from phallic to genital.

Now what is the meaning of the inhibition which I have been invoking? In terms of objective description of behaviour, it means merely that a force obstructs a tendency which is set in motion. In terms of psychic function, it means that the wish which is the psychic representative of the instinctual pattern cannot be permitted gratification, in fact, that the wish cannot even rise to consciousness, which it ordinarily must do before any attempt at gratification can be made. Accordingly, the only tendencies which, in the normal adult, may become active, and the only wishes which may become conscious, are those based upon the final elements in the developmental series, namely, the genital.[4]

What evidence can be marshalled to support this thesis? First, let us consider whether the theory corresponds to the available facts. Since the theory is concerned with development by means of serial maturation, it is significant only to the extent that maturational series feature significantly in development. The crucial function of the series of sexual aims is now incontrovertible and any reassertion would be gratuitous. However, it should also be noted that there is a developmental series of sexual objects, and in a sense, of sexual roles (passive, reflexive, active) both of which will be discussed in greater detail below. It is clear that any theory of maturation must deal with series.

The theory also requires inhibitory forces. Displacement activities appear in lower animals when the 'discharge . . . of motivation is . . . prevented', whether by the opposition of an inhibitory drive or by the absence of suitable opportunity for gratification. Now if the phenomenon of displacement activity plays a significant role in human instinctual maturation, its evocation cannot be left to some chance external frustration. Provision must be made, as an organically determined function of the central nervous system, for the interposition of an obstructive force to effect the replacement of the earlier by the later elements in the series. Such obstructive or inhibitory forces have been described in lower animals. For example, the victorious one of a pair of fighting animals of the same species cannot proceed to a kill once the loser gives the surrender signal, in a species in which such a mechanism exists. Adults are unable to act aggres-

[4] In his discussion of this paper, René Spitz offered the concept of a maturational gradient, sexual aims becoming successively available and unavailable. The particular outlet which the sexual drive selects at any moment is determined by the gradient of availability of sexual aims. This suggestion casts my hypothesis into the form of a field theory rather than a dynamic theory, with no loss in elegance and, for some purposes, possibly some gain. One must then make statements about the conditions responsible for the gradients. To my mind, not only external frustrations and opportunities, but also internal, autochthonous inhibitory forces, loaded by experience, must be taken into account.

sively to the young of their species. Lorenz describes the inhibition of food ingestion in a male fish while carrying its young in its mouth. He also describes relative inhibition of hunting among some predatory animals in their own territories. Note that these examples of inhibition are directed against aggressive tendencies. I am not aware of any instance in lower animals in which maturation proceeds by inhibition of immature forms of behaviour.[5] On the other hand, when we turn our attention to human behaviour, we regularly find forces which inhibit immature forms of instinctual gratification in the sense of excluding them from consciousness and preventing their execution. In the *Three Essays*, Freud says ' the order in which the various instinctual impulses come into activity seems to be phylogenetically determined; so too, does the length of time during which they are able to manifest themselves before they succumb to the effects of some freshly emerging instinctual impulse or to some typical repression.' Here Freud seems to consider the possibilities that the immature pattern is inhibited either by the appearance of the more mature pattern, or by a specific inhibitory force, repression. The hypothesis I am here defending simply relates these two possibilities in the following way: each immature instinctual impulse must succumb to inhibition, i.e. repression, before the more mature impulse can be activated. At another point, Freud says, ' Our study of the perversions has shown us that the sexual instinct has to struggle against certain mental forces which act as resistances, and of which shame and disgust are the most prominent. It is permissible to suppose that these forces play a part in restraining that instinct within limits that are regarded as normal.' Here Freud identifies the negative affects, shame and disgust, as the restraining mental forces that act as resistances to the immature expressions of the sexual instinct. Again, ' It is during this period of total or only partial latency that are built up the mental forces which are later to impede the course of the sexual instinct and, like dams, restrict its flow—disgust, feeling of shame and the claims of æsthetic and moral ideals . . . in reality this development is organically determined and fixed by heredity.' In this passage Freud indicated that the inhibitory forces do not become active until the period of latency, while my hypothesis, and indeed Freud's first statement quoted in this paragraph, require that even the very first developmental shifts, long before latency, are accompanied by, or occasioned by, inhibition.

This maturational inhibition is called, by Freud, primal repression (*Repression*, 1915): ' Now we have reason for assuming a primal repression, a first phase of repression, which consists in a denial of entry in consciousness to the mental (ideational) presentation of the instinct. This is accompanied by a fixation: the ideational presentation in question persists unaltered from then onwards and the instinct remains attached to it. The second phase of repression, repression proper, concerns mental derivatives of the repressed instinct-presentation, or such trains of thought as, originating elsewhere, have come into associative connection with it. On account of this association, these ideas experience the same fate as that which underwent primal repression. Repression proper, therefore, is actually an after expulsion.' This statement of Freud not only asserts the existence of maturational inhibitory forces, but declares, as my hypothesis requires, that the inhibition is merely an inactivation, a blocking of the impulse, but not obliteration of it. This latter point is more clearly expressed in *Inhibition, Symptom and Anxiety*: ' An important element in the theory of repression is the view that repression is not an event that occurs once, but that it requires a permanent expenditure of energy. If this expenditure of energy were to cease, the repressed impulse, which is being fed all the time from its sources of energy, would seize the next occasion to flow along the channels from which it has been forced aside, and the repression would either fail in its purpose or would have to be repeated an indefinite number of times.' The reversibility of the inhibition is emphasized in the *New Introductory Lectures*: ' Our attitude to the phases of libidinal organization has in general altered somewhat. We used formerly to emphasize the ways in which one phase gives way to the next; nowadays we direct our attention more to the facts which indicate how much of each earlier phase persists side by side with, and behind, later organizations and obtains permanent representation in the economy of the libido and in the character of the individual. Even more important are those investigations which have shown us how frequently under pathological conditions regression to earlier phases takes place, and that certain regressions are characteristic of certain forms of illness.'

That the term repression applies both to the inactivation of the instinctual impulse and to the exclusion of its psychic representation from consciousness, is given in the following passage from *Inhibition, Symptom and Anxiety*: ' Just as the ego controls the path to action in regard to the outer world, so it controls access to consciousness. In repression it displays its power in both directions, acting in the one manner upon the instinctual impulse itself and in the other upon the psychic representative of that impulse.'

The theory of the maturational importance of displacement activity requires that the lifting of the

[5] For this reason, Sillman prefers to consider the displacement phenomenon a means of controlling aggression. Maturational inhibition, i.e. repression, he relates to the phylogenetic appearance of counter-instincts (*v. infra*).

inhibition should be followed by the reappearance of the more immature patterns of instinctual gratification. The readiness of these immature forms to reappear in neurosis indeed justifies the description of neurosis as the result of partial escape from repression. The only pertinent experimental evidence I can find is the now classical series of experiments of Klüver and Bucy. Upon resecting both temporal lobes of monkeys, Klüver and Bucy observed a pronounced increase in the intensity and variety of sexual activity which seems to warrant the term 'uninhibited', and if observed in man, would probably deserve the term 'unrepressed'. In fact, it was essentially this phenomenon, since confirmed by others, that led me (1954, 1955) to propose that the temporal lobes are the site of elaboration of negative, that is, unpleasant and inhibiting, affect, which in turn activates repression in particular and defence in general.

While this correspondence between the hypothesis and the data of animal and human behaviour is a necessary condition for the validation of the hypothesis, it is far from sufficient. Let us consider the obvious alternative hypothesis. Could the process of behaviour maturation in man be ascribed to merely organic central nervous system maturation? As I noted above, organic maturation makes available newer patterns of behaviour, but it is one thing for a pattern to exist and another for it to be activated. My hypothesis deals with the successive activation of more mature forms of behaviour, and it requires organic maturation. Given an organic maturational sequence, the programme of activation of the several patterns may vary. For example, the activation of one may have no relation to the fate of its predecessor—the situation which I believe obtains in lower mammals. On the other hand, the activation of each successive pattern, after it is laid down, may be delayed until the preceding pattern is inhibited—the situation which I believe obtains in human beings. The neural equipment for a behaviour pattern may antedate the exhibition of the pattern. For example, Beach quotes a number of experiments which demonstrate that patterns of reproductive behaviour may be evoked by hormone administration considerably sooner than they would appear spontaneously. Again, female mating behaviour may be evoked in male animals by suitable external stimuli or by hormonal manipulation and, *mutatis mutandis*, male mating behaviour in females. We may infer that the neural patterns for both forms of behaviour exist in each animal, but that predominantly one set is activated under ordinary circumstances. Let us compare coital behaviour of lower animals with that of human beings. In the former case, oral and anal activities appear freely in introductory manœuvres and in foreplay, but to our knowledge, seldom impede or modify coitus itself. In the human adult, on the other hand, while oral-oral contact is usual, and oral-breast contact frequent, oral-genital and anal contacts are not usual in performance, though analysis discloses the universal unconscious disposition toward such activity. In man, moreover, the unconscious needs not only appear during foreplay, but often colour, distort, and occasionally impede the coitus proper. In other words, the stimulus to coitus in lower mammals may also innervate pregenital patterns of behaviour, but the execution of these patterns constitutes merely an addition to, but not a distortion of, or an obstacle to, successful coitus. On the other hand, in human beings, successful coitus requires inhibition of all but minor fragments of pregenital behaviour. (Cultural factors, of course, determine the amount and quality of pregenital residua which are tolerated in the coital situation. However, the very same cultural factors determine which pregenital wishes are subjected to primal repression. Therefore it is reasonable to suppose that those pregenital fragments which appear in adult coitus are those which were not repressed, or were imperfectly repressed. Therefore, their deflected impetus does not contribute to the activation of the coital act.) While this apparent difference may be merely the result of closer familiarity with the data of the human being than the animal, there is no evidence that in animals immature patterns of behaviour strive against a constant inhibitory force. (There are two obvious exceptions to this statement. The first is the fact that the experiments of Klüver and Bucy demonstrate that in adult primates bilateral temporal lobectomy permits forms of sexual behaviour to appear which are ordinarily not evident. This fact can as readily be considered a confirmation as an inconsistency, since the behaviour of primates is intermediate between the behaviour of man and of lower mammals. The second exception is that, as we have already observed, there are some important forms of behaviour inhibition in lower animals; but these seem all to be directed against aggressive rather than erotic behaviour. For that reason, in my opinion, we cannot directly compare the behaviour effects of brain manipulations in higher species with those in lower species; on the contrary, the differences may give some clue to the differences in behaviour organization of the several species. In general, I am inclined to believe with Sillman that phylogenetic development among mammals is to be correlated with development of temporal lobe structures, and the latter with what Sillman calls counter-instincts (instincts which oppose more primitive instincts), though I would stress the inhibiting forces, i.e. repression, rather than the instincts which they activate.)

Another way of accounting for maturational activation of patterns of instinctual behaviour is to invoke endocrine changes which are known to accompany and organize some aspects of physical development. However, our discussion of the

role of the endocrines in instinctual activation yielded only the conclusion that human behaviour is less closely regulated by hormones than the behaviour of other vertebrates; indeed, that hormones play a priming, but not an activating, role in the control of behaviour. 'The hormone is to be regarded, not as a stimulus to behaviour, nor as an organizer of the overt response, but merely as a facilitating agent which increases the reactivity of specific neuromuscular systems to stimulation' (Beach).

A good theory should not merely be consistent with existing facts and surpass other possible explanations, but it should offer some new aspect or organizing principle to the material with which it deals. My hypothesis accounts for continuity of instinctual motivation in the human. First, with respect to seasonal timing, if we take as a baseline the behaviour of the vertebrate between its seasons of reproductive activity, then we may say that the advent of the reproductive season provides an additional quantum of motivation which drives the whole series of reproductive activities. It does not seem to be a matter of redirection or of substitution, but of addition. Now freedom from seasonal regulation of reproductive activity is not limited to man. It is approached fairly closely by many other species, especially by the males. What distinguishes the human from the infrahuman arrangement more clearly is the continuity of instinctual motivation from birth to death in the former. We have no reason to assume any continuity of instinctual motivation connecting the tie of the young to the parent and the several seasonal efflorescences of sexual behaviour in animals. In the human, on the other hand, we know of only one discontinuity in erotic activity, namely, latency. However, latency is characterized not by cessation of libidinal ties, but by inhibition of drives aiming at physical contact with the instinctual object. In other words, latency is not a discontinuity in instinctual motivation. Hence we may speak of temporal continuity of instinctual motivation in man, and of discontinuity relative and variable, in animals. By what mechanism is continuity substituted for discontinuity? It is my suggestion that in man, the instinctual tie of young to parent never stops. Adult aims and objects are substituted for their infantile counterparts, but there is never a termination and resumption of the motivational impulse. The displacement phenomenon makes it possible to retain the infantile attachment while redirecting it to adult aims and objects. This relative prolongation in man of what are early ontogenetic stages in lower animals was described by Bolk and designated by him retardation with fetalization. The application of the retardation concept to metapsychology has been extensively discussed by Róheim and recently by Weyl. The acceptance of the idea that the displacement phenomenon is significant in the ontogenetic maturation of the erotic instinct in man makes it possible to account for the continuity of libidinal motivation which is characteristic of the human being.

b. Defence

But the concept of displacement activity has still broader implications. As it is used by the ethologists, displacement activity refers to a shift of the technique of instinctual gratification. However, a similar mechanism permits a shift of object of instinctual gratification. Such shifts of object are fairly commonplace. A strongly motivated male may mount another male if a receptive female is not available. Infrequently, there are matings between individuals of different species. Occasionally inanimate objects such as sticks are used for genital stimulation. With very high motivation, the instinctual pattern may be released even in the absence of any object; such instinctual activity performed in the absence of an object is called a vacuum activity. There seems, therefore, to be a principle in the operation of the instinctual apparatus of vertebrates which permits the substitution of one of the individual elements for another among techniques and also among objects, a more remote or less suitable element being requisitioned when the desired or appropriate element is unavailable. This plainly corresponds to Freud's observation in metapsychology, that when libidinal interest in a given aim or object is obstructed by internal or external obstacles, it is displaced to the images of other aims or objects. This displacement of libidinal impulse was best described and handled by the concept of a fluid 'psychic energy'. Tinbergen uses the term 'motivational impulse' for the corresponding instinctual variable. The existence of a limited displaceability of motivational impulse in the instinctual life of lower animals and an extensive displaceability of libidinal cathexis in the human psyche seems to be a fundamental principle in the biology of instincts.

While the execution of a displacement activity in animals is ordinarily a brief, discrete process, in my hypothesis I have suggested that the process may remain dynamically active for decades. In the animal, a displacement activity is used for current, momentary adjustment; I have considered its possible function in directing instinctual activities over almost the entire lifetime of the human being. Is the concept of displacement activity useful in the human being in dealing with the current instinctual operations completed within periods of time of the order of a day? It is a fairly pervasive principle of metapsychology that psychic events of adult life are essentially repetitions of prototypes that occurred in infancy. Thus the pursuit of particular patterns of instinctual gratification in adult life is ascribable to a repetition compulsion. Every cognition of

adult life is a re-cognition. Even the psychic defences are considered to be patterned after infantile modes of gratification. And repression proper is a secondary repression reasserting a primal repression of early childhood. Therefore, if the process of displacement activity obtains in ontogenetic maturation, we may look for it in current instinctual function. If we remember that the principle of displacement activity is essentially a shift of motivational impulse from one member of a series of instinctual elements which is thwarted to another, we may consider applying it to the metapsychology of defence—for a defence is essentially a device whereby a pattern of instinctual behaviour which is acceptable to the ego is substituted for one which is rejected by the ego. To give a specific example of such an application, let us consider repression. Above, I suggested that the inhibitory force which is effective in the series of displacement activities responsible for instinctual maturation is the organic basis of primal repression. If current displacement activity is a reassertion of infantile displacement activity, and if repression proper is a reassertion of primal repression, then we may infer that repression proper or secondary repression is the current psychic inhibitory force responsible for the shift in libidinal cathexis, the shift corresponding to the current execution of instinctual displacement activity.

In summary, I suggest that the concept of displacement activity which operates in the instinctual life of vertebrates may profitably be applied, *mutatis mutandis*, to the maturation and current function of the psychic apparatus of man.

D. INSTINCTUAL WISHES

The phenomena of displacement activity and mammalianization not only apply to the dynamics of instinctual behaviour but can be employed to examine its contents as well. If we consider the erotic instinct to be the tendency immanent in the structure of the central nervous system of an individual to bring that individual into a definite relation, usually physical contact, with another individual of the same species for the apparent purpose of performing together a function which neither can perform alone, then we may infer that the psychic representation of the instinct is a wish on the part of the subject individual that he unite with his object.

Freud, in attempting to construct a theory of instincts which would apply to human behaviour, considered object, aim, and source (and impetus) to be the significant variables: he asserted that since the instinctual drive was not itself a psychic process, but was merely ' a demand upon the mind for work ', the instinct could have no mental quality. The action of the instinct on the psychic life is to create instinct representatives which are subjectively appreciated as wishes: ' The kernel of the system Ucs. consists of instinct-presentations whose aim is to discharge their cathexis; that is to say, they are wish-impulses ' (*The Unconscious*, 1915). If the transition from instinctual need to primitive wish is actually a one-to-one translation, as I suggest, then we should find analogous elements in both, and should consider it reasonable to apply inferences about one to the other. We may discuss instinctual needs in the light of recent ethological data, and primitive wishes on the basis of the data of psychoanalysis; the two sources should be complementary.

1. Contents

In every primitive wish the following elements may be ascertained: representations of the subject himself, of the object, and of the contact apparatus; the role the subject will play, and the specific technique he will use to achieve gratification.

a. Subject

In any fantasy expressive of a wish, an image of the subject himself appears. This image of the self which appears as the subject of the wish fantasy is the basis of the ' I ' in the statement of the wish, and a corresponding element designating the subject himself must be included in the neural disposition which is responsible for the instinctual pattern. This element, the subject himself, is usually taken for granted, but it is well to remember that every primitive wish and every derivative wish, fantasy, and dream is a statement of the need for contact between subject and object. Every dream expresses a wish of the dreamer, in which he participates, and every affect which appears in the dream is the affect of the dreamer.

That the psychic representation of the subject himself changes in the course of his development and so plays a significant role in determining the nature of primitive wishes and their derivative fantasies at every point of psychosexual maturation, has been observed and reported. I am not prepared to discuss the phenomenon at this time, and it is not necessary for this presentation to do more than note its existence.

b. Object

We are familiar, from the material of psychoanalysis, with the shift in sexual object. We know that the initial object of the infant is the mother. At a given point the father comes to occupy more and more of its libidinal interest. Later homosexual contemporaries and, ultimately, heterosexual contemporaries successively become the objects of the erotic instinct. The shift from one object to another is accompanied by repression of the psychic representation of the earlier object in sexual wishes. In the light of our previous discussion, it might be more correct to say that the shift is actually occasioned by the repression.

c. Apparatus

We may now consider the sexual apparatus. Freud states that the ' sexual aim of the infantile instinct consists of obtaining satisfaction by means of an appropriate stimulation of the erotic zone which has been selected in one way or another.' I believe that satisfaction is used here in a subjective sense, and this statement, therefore, unfortunately, implies that the phenomenon of consciousness is an essential factor in the operation of the instincts. I would prefer to adhere to Freud's suggestion that instinctual drive be considered a neural process, but not a psychic one, though it finds psychic expression. Freud also defines the aim (in *Three Essays*) as the specific act which unites subject with object. Now in discussing sexual aims, Freud actually refers to three separate elements, namely, the anatomical apparatus by means of which subject and object come into contact, the quality of activity or passivity, which I shall call role, and the character of the instinctual act, which I shall call technique.

To recapitulate classical theory, the initial sexual apparatus consists of mouth and breast. This is subsequently replaced by the anal zone with its product, which in turn is replaced in what we call the phallic stage by the external genitalia of both sexes and, of course, ultimately, in the genital stage by penis and vagina respectively. Here again repression accompanies, or perhaps more precisely, if our theory is correct, occasions, each shift.

As we shall see below in our discussion of technique, not every instinctual act has as its immediate goal physical contact. Preliminary goals deal with establishing a remote relation, for example, seeing or showing, startling or hearing, influencing or submitting. Such goals may deal with the erotic zones, but on the other hand they may deal with physical structures which are only secondarily libidinized, or with symbolic attributes of the physical organism such as wealth, prestige, name, possessions, children, and so on. However, such omission of specific contact apparatus obtains only in preliminary wishes as opposed to consummatory wishes, and in derivatives as opposed to primitive wishes.

Of course, in every wish a pair of contact organs is specified: the organ of the subject and the organ of the object.

It is important to realize that, with respect to both the series of objects and the series of sets of sexual apparatus, neither a repressed object nor a repressed sexual apparatus is automatically excluded from playing an important role in the subject's life. Following repression of the image of the mother as the sexual object and repression of the image of the mouth as sexual apparatus, the image of the mother nevertheless appears in maternal roles and the image of the mouth continues to play a nutritive role. Repressed images of objects are merely excluded from the role of sexual object and repressed images of sexual apparatus are merely excluded from the sphere of sexuality (though in some forms of neurosis, repression may extend to nonsexual roles of other individuals and of apparatus which was once sexual, as well). In other words, it is not the image of the object or apparatus which is repressed, but the sexual wish in which such images appear.

d. Role

Implied in every primitive wish is the element which I call role. It corresponds closely to the grammatical notion of ' voice ' and states simply whether the subject wishes to act upon the object or to be acted upon by the object, that is, whether the subject's role is to be active or passive. We should not be misled by the consequence of the wish. Thus, in the wish to seduce, the subject plays an active role, even though, if he is successful in seducing, he may be acted upon sexually by the object. Similarly, in the wish to be provoked, the subject plays a passive role, even though he may respond to provocation by acting upon the object. In some wishes, the subject acts upon himself, so playing a reflexive role. Such reflexive wishes obviously do not directly serve the erotic instinct as we have defined it above, namely, the instinct which enforces union with a second individual for the accomplishment of some purpose not attainable alone. But they may be considered to do so indirectly. For example, a reflexive wish may be used in defence against an active or passive wish which must be repressed. Thus, the wish to be punished may be replaced by a wish to punish oneself. A reflexive wish may be a preliminary step in a sequence leading to some subsequent interaction of subject and object. For example, one grooms oneself to become more attractive to a sexual object. Some wishes may be expressed in a medial form, that is, the action is intransitive, e.g. ' I wish to grow '. However, such wishes can always be transposed to more primitive, active, passive, or reflexive forms, e.g. ' I wish to possess my father's penis ' or ' I wish to enlarge myself '.

e. Technique

The concept of technique of instinctual gratification I introduced in my papers relating metapsychology to brain function (employing there the term ' strategy '). It was devised originally to account for the commonplace psycho-analytic observation that each individual has a number of favourite modes of pursuing his goals in reality and in fantasy. For example, the phobic individual favours fantasies in which topographical hazards, obstacles, and accomplishments are employed, including such concepts as high and low, inside and outside, open space and obstruction, the negotiation of gaps via bridges, and the conquering of such challenges as fire and water. The compulsive

individual favours forcing, pressing, breaking, crushing, and also sudden reversal, as his modes of accomplishing his instinctual purposes. The individual prone to depression favours tendencies of incorporation and ejection, clinging and discarding. The schizophrenic prefers projection, influence, and rebirth. Techniques such as exhibition and viewing are universal. Techniques of linkage and isolation are encountered in phobias, depression, and schizophrenia. Aggression, too, may be considered to be a technique for instinctual gratification, most prominent, for example, in sadistic and masochistic fantasies (though obviously its erotic function does not exhaust its significance, and it requires further discussion in terms of the death instinct). Even identification may be considered a mode of instinctual behaviour by which subject relates to object. It seems to me that the individual's set of favourite techniques is at least as directly related to choice of neurosis as preoccupation with one set of contact apparatus, though obviously the two are to a certain extent related, since each set of sexual contact apparatus requires the application of a specific set of techniques.

(i) In animal instincts

Tinbergen, describing instinctual behaviour in animals, points out that most instinctual goals are pursued by attaining a number of sub-goals, and each of these, in turn, is reached ultimately by a set of individual motor acts performed either singly or in sequence. For example, in the specific case of the three-spined stickleback, the reproductive instinct includes fighting behaviour, nest-building behaviour, mating behaviour and parental behaviour. Furthermore, fighting behaviour includes biting, threatening, chasing; building includes testing of materials, boring, gluing; mating behaviour includes zig-zag dance, leading female to nest, showing entrance, quivering, fertilizing the eggs; caring for the offspring includes fanning, rescuing eggs, and so on. Now these specific motor acts, and others like them, correspond to my idea of instinctual technique. We have only to note one difference. Each motor act in lower animals (below or including subprimate mammals) belongs to, and is used by, only one instinctual pattern for only one instinctual sub-goal. For example, fighting is often performed in one way when it is used by the reproductive instinct, and differently in defence against predators. (On the other hand, the number of types of muscular activity is limited and essentially the same basic movements appear in several motor acts, e.g. the pattern of muscular activity is basically quite similar, though easily distinguished, in showing (the female) the entrance to the nest, trembling (to induce the female to spawn) and fanning movements (to ventilate the clutch of eggs).) In man most instinctual techniques can be employed in any of the primitive wishes, that is, in connexion with any object, any role, and any contact apparatus. As pointed out below, even techniques specifically associated with a particular contact apparatus may be applied to others. Nevertheless, the concept of instinctual technique, based upon, and devised to handle, psycho-analytic material, seems to me to correspond closely to the ethological category of ultimate motor acts executing instinctual behaviour.

Now Tinbergen describes a classification of such motor acts (suggested by Craig) into appetitive behaviour and consummatory acts. Let us consider the consummatory acts first, since they constitute a more homogeneous group. They are the acts which consummate the instinctual need, e.g. feeding, fighting, coition. They are stereotyped in pattern for the individual and for the species. They are therefore obviously executed by constitutionally provided motor patterns. I may add that since some of them (e.g. sucking, grasping) appear before the cerebrum is myelinated, and some appear inappropriately when consciousness is seriously clouded (e.g. plucking, fingering the genitals), these, or perhaps all consummatory acts, are mediated by infra-cerebral structures such as spinal cord and brain stem. I believe that this grouping of instinctual acts can be applied to the technique of the primitive wish. Note that these consummatory techniques are those which must be closely associated with the sexual contact apparatus. It is interesting that because the execution of the consummatory act terminates all other activity related to the instinctual goal or subgoal, Tinbergen says that ' such an end response consumes the specific impulses responsible for its activation '. In other words, he believes that it is not a sensory pleasure arising from consummation which terminates the instinctual activity, or any change in the contact apparatus itself, but simply that the performance of the act cancels whatever physiological force motivated the instinctual behaviour in the first place (motivation impulse).

Appetitive behaviour, as defined by Tinbergen (after Craig) includes all those acts which anticipate and prepare for actual consummation. They start with seeking the object and continue with methods of pursuit, approach, capture, attack, and so on. Now I would suggest that this group be divided into at least two categories: those that lead up to and result in discovery of an object, and those that follow the discovery and ' decision ' to pursue the object. In other words, only those acts in the first group should be called appetitive, since they consist of searching and scanning in response to an ' appetite '. These acts are less stereotyped than consummatory acts, but still display considerable regularity and consistency among individuals. Stereotyped searching and attending can be evoked by stimulation of the anterior portion of the temporal lobe in animals. After separating out these preliminary appetitive acts, we are left with a whole

collection of instinctual acts which include, for example, methods of pursuit, catching, handling, positioning, and persuasion. This group of acts I would call approach or positioning acts. They are considerably less stereotyped than consummatory or appetitive acts, more complex and more modifiable in response to external circumstances.

(ii) In human wishes

Let us now apply this classification of techniques to the primitive psychic wish. Appetitive techniques in man include searching the external environment. However, scanning the memory is also an appetitive technique, only here the search is for the memory of a past object in the hope that it may facilitate current object finding. It is probably proper to include among the appetitive techniques, techniques for calling attention to oneself in preparation for a passive role in libidinal contact. Offering visual, auditory, or olfactory display to draw the attention of the object falls into this subgroup. In sublimation, such techniques are much elaborated and form the basis of advertising and public relations.

Approach or preparatory techniques, that is, those which bring subject and object together, include threat, pursuit, trapping, manipulation, deceiving, negotiation, stealing, imitation, accumulating, building, mixing, concealing, working material, and so on. They are seen in simple form in the primitive wish, not essentially different from their form in animal behaviour; they also exist in derived forms. Thus, the negotiation of topical obstacles is extended into a whole system of transportation, including the use of vehicles, channels, bridges, and so on. Manufacturing and building are also derivatives based upon instinctual techniques. Such techniques as trapping, threatening, bluffing, manipulating, compelling are usually indirectly employed, using such intermediate accessories as money, prestige, and verbal agreements. Planning and calculation, problem solving in general, are newly evolved methods of ordering the other, more primitive techniques into the most effective sequences for achievement of the goal. Testing, which in lower animals consists merely of close examination, in man becomes the whole science of measurement, experimentation, and the intrapsychic technique of imagining consequences.

The consummatory techniques are obviously closely related to the specific contact apparatus to which they apply. For example, sucking, tasting, chewing, and swallowing are available to the oral drives; the techniques of dejection, purification, the ability to recognize and separate the clean and the dirty, decoration, and possibly even primitive detection and recognition of other individuals are specific techniques available to those erotic activities which we assign to the anal drives; the techniques of penetration and receiving the penetrating object are characteristic of genital activities. Even these have derived forms. For example, the use of tools may be considered to be an elaboration of the use of limbs and appendages. Techniques of incorporating, penetrating, receiving, are extended from their original objects, the body-contact apparatus, to sheltering structures in general. Moreover, the modes by which two organisms make contact may form the models for a host of geometrical concepts.

Judging from the fantasies which emerge during the course of psycho-analytic treatment, we see that techniques appropriate to a particular sexual apparatus are often enough assigned to another sexual apparatus. For example, the techniques of biting off and incorporating, obviously appropriate to oral fantasies, are often used in anal and genital fantasies as well. The procedure of being forcibly penetrated, obviously appropriate to passive genital fantasies, may be seen in oral and anal fantasies too.

(iii) In ego function

Further elaboration of the concept of technique reveals the manner in which elements of instinct mechanisms provide the material basis of ego function, both elementary and abstract. One of the characteristic features of human instinctual behaviour, as contrasted with that of lower animals, is its plasticity, that is, its tendency to modify primitive patterns by substituting elements from other sub-instincts and from patterns originating at other stages of development. Let us consider specifically the instinctual need to suck at the mother's breast. Now the technique of sucking in the lower mammals is largely confined to the function of infantile feeding. By contrast, in man the technique of sucking is freed from this single function in the following ways. First, it is freed from the mother as its specific object, so that breast sucking reappears in adult sexual activity. Second, it is freed from the breast as its anatomic target and the sucking of genitals, tongue, and lips appears in adult sexual activity. Third, it is no longer restricted to the mouth as executive organ, for fantasies of anal and vaginal sucking are encountered in psychoanalysis and it is a prescribed exercise of Yoga to suck up and expel water per anum through a straw by means of control of the abdominal musculature. Fourth, the technique of sucking can be applied even in the absence of an animate object; for example human beings regularly suck at foods, cigarettes, tubes. Fifth, the technique of sucking can be reproduced mechanically—that is, it may be freed even from the subject as the agent; we have sucking machines such as pumps, blowers, siphons. Sixth, a further step in freeing the technique of sucking from the primitive instinctual wishes in which it originates is the development of the *concept* of sucking, suction, or vacuum. This is an abstraction which consists of the common principle contained in all wishes to suck (or be sucked). The creation of such an abstraction provides material

for the intellectual task of predicting on the basis of general principles rather than on the basis of fortuitous experience. Its creation and use are therefore essential features of the secondary process operations of the ego. We can see in this example how materials of the ego may be derived from the autochthonous contents of the id. Finally, it is well known that each individual has characteristic modes of conceptualization; some people think topographically, some in terms of forces, some in quantitative and others in qualitative terms. These modes of conceptualization can also be understood as mental crystallizations of instinctual techniques, so that techniques determine not only content but also process of the ego. For this purpose sucking is not the most fortunate example, but it is not wholly inappropriate, since one speaks of absorbing information, and also of being absorbed in some mental occupation. A patient who was dissatisfied with his ability to memorize, visualized his brain resting on a printed page and sucking up the letters. Other infantile consummatory techniques are more readily discerned in modes of thought, e.g. incisiveness from biting, retentiveness from sphincter control, precision from cleaning, and penetration and receptiveness on the genital level. Indeed the synthetic function of ego may, in this sense, be considered a derivative of id techniques of uniting. Nunberg says, '. . . since the ego is derived from the id, it is probably from this very source (Eros) that it acquires its binding and productive power.'

2. Organization and Structure

We are now in a position to offer a suggestion about the form of instinctual behaviour in man. We have noted that whereas in inframammalian animals specific acts are related to specific instincts, in man and perhaps in all mammals there is a single erotic instinct which has the function of determining all behaviour requiring the participation of another individual. (Although the erotic instinct presides over all behaviour requiring the participation of another individual of the same species, its domain in man at least is not limited to two-person relations. It may activate reflexive or narcissistic behaviour in which the subject individual also plays the role of object, and it may activate sublimations in some of which no object appears.) In the service of this instinct, series of objects, sets of sexual apparatus, roles and techniques of procedure are available. In the course of development, a large number of combinations of the various objects, sets of contact apparatus, techniques and roles are formed. Each combination determines a primitive wish. ' We therefore have to conclude that the equal impulse-excitations are exceptionally " plastic ", if I may use the word. One of them can step in in place of another; if satisfaction of one is denied in reality, satisfaction of another can offer full recompense. They are related to one another like a network of communicatory canals filled with fluid, and this in spite of their subordination to the genital primacy, a condition which is not at all easily reduced to an image. Further, the component-instincts of sexuality as well as the united sexual impulse which comprises them, share a great capacity to change their object, to exchange it for another, i.e. for one more easily attainable; this capacity for displacement and readiness to accept surrogates must produce a powerful counter-effect to the effect of a frustration ' (Freud, 1917, *A General Introduction to Psycho-Analysis*).

Now while we have spoken of these categories which appear in the primitive wish as though any member of one category may be associated with any members of the other categories, we find in our clinical work that in any given individual, certain sets are especially prominent. These sets are the primitive unconscious wishes with which we deal clinically. Let us consider for a moment the simplest, most infantile, most deeply repressed wishes. It is these which are most difficult to recapture in terms of actual memory in analysis and which require reconstruction. They are often incorporated into fantasies which are more or less distorted versions of actual, historical events. We do not know exactly how any given set of instinctual components becomes associated with a real life situation; nor is there any great unanimity about the relative importance of accidental occurrence and constitutional predisposition in determining which specific sets of components become important. It is credible either that a set of instinctual components determined constitutionally should find an appropriately expressive set of external circumstances, or that a particularly forceful impression should combine instinctual components into such a set and render the combination permanent and important. My point is that I believe that this is the level at which constitutional and environmental factors combine in such a way that the execution of an instinctual drive becomes identical with the repetition of an infantile wish or fantasy. In other words, it seems to me that the formal unit of instinctual behaviour in man is the primitive infantile wish, which is merely the psychic expression of the specific set of instinctual components. The wish is the paper currency of the psychic world, the manipulation of which determines the fate of the organic instinctual drives which we may compare to the precious metal transferred hither and thither in subterranean vaults. Instinctual drives have no more direct representation in the psychic life. ' An instinct can never be an object of consciousness —only the idea that represents the instinct. Even in the unconscious, moreover, it can only be represented by the idea. If the instinct did not attach itself to an idea or manifest itself as an affective state, we could know nothing about it ' (Freud, *The Unconscious*, 1915).

It is for this reason that instinctual pressure results in repetition compulsion. Each wish or fantasy becomes a paradigm after which the individual attempts to model his subsequent experience. In any given individual, a complete picture of the instinctual life can be given by a catalogue of primitive, unconscious wishes. 'Every human being has acquired, by the combined operation of inherent disposition and of external influences in childhood, a special individuality in the exercise of his capacity to love—that is, in the conditions which he sets up for loving, in the impulses he gratifies by it, and in the aims he sets out to achieve in it. This forms a cliché or stereotype in him, so to speak, (or even several) which perpetually repeats and reproduces itself as life goes on, in so far as external circumstances and the nature of the accessible love-objects permits and is indeed itself to some extent modifiable, by later impressions' (Freud, *The Dynamics of Transference*, 1912).

We assume the existence of a series of unconscious primitive wishes, each evoked at its appropriate phase of maturation. The maturational processes which rouse each to initial activity include repressive forces directed against its predecessor. It remains active only so long as its predecessor remains repressed—and it itself suffers repression—at the proper developmental point—with activation of its successor in the series. In the adult, we may envisage a series of primitive wishes, or more precisely, a series of groups of primitive wishes, in linear arrangement of which only the last group—namely, heterosexual-genital, extra-familial wishes and fantasies, can become conscious. However, the linear disposition is in dynamic equilibrium. Repression does not mean permanent or even complete inactivation.

I suspect that a discussion of all possible forms of this dynamic equilibrium among primitive wishes and repressive forces must necessarily encompass all the variations of normal and abnormal dynamic psychology. For this presentation, the following brief sketch will suffice.

a. Objects

The series of libidinal objects which appear in the series of unconscious, basic wishes culminates with the consciously acknowledged, heterosexual love-object. The tendency, despite repression, to establish relations with homosexual objects, and to revive childhood experiences with parental objects by transferring their characteristics to the current object, presses upward continually. At best, this tendency causes fluctuations in the nature and intensity of the individual's relation with the love-object. At worst, it destroys the relation or makes it a source of misery to one or both partners. The attempt to balance the conscious love for the acknowledged heterosexual object against these disturbing forces occupies some proportion of each person's daily psychic activity, and usually of overt behaviour as well. This feature of psychic life is more susceptible to neurotic impairment than the ability to work and the capacity to respond to urgent, external demands.

A young man with a compulsive neurosis is unable to marry or even to carry a relation with a girl to a point of developing any real feeling for her, although his bachelor life is lonesome and he is strongly attracted to women sexually. He disdains marriage because he is unwilling to assume responsibility for a wife and children. After seeing a young woman two or three times he develops obsessive fears that he might infect her venereally (even though he abstains from intercourse) or that she will be hurt as a result of his neglect. He prefers to obtain sexual gratification commercially and to restrict emotional ties to servants. Moreover, his feeling about his mother fluctuates between indignation at being expected to visit her and sad longing when he stays away. His relations with male friends are also superficial and transitory and his feelings about his father fluctuate just as do his feelings about his mother. It is clear that this man is unable to avoid distorting the images of the young ladies whom he dates by superimposing upon them the childhood image of his mother, or similarly to avoid distorting the images of his male friends by superimposing on them the childhood image of his father. However, I believe that it is equally true that his repeated and persistent though unsuccessful efforts to establish affective relations with his contemporaries are driven by the instinctual force resident in the repressed primitive wishes about mother and father. Thus, in this case, the repressed primitive wish activates the libidinal efforts with contemporaries and at the same time, because the repression is not complete, frustrates these efforts by permitting the image of the repressed object to distort the image of the current object.

b. Techniques

The techniques for instinctual gratification are not repressed. In fact, during latency the process of education consists essentially of developing the constitutionally provided techniques for instinctual gratification to the point where speedy, skilful, efficient performance becomes possible in a large number of fields of human endeavour. Because these techniques are not repressed, and because they are elements of the most primitive and oldest wishes, their employment in dreams, symptoms, conscious fantasies and daily work permits a partial relief of instinctual pressure. These techniques are among the most readily available clues the psycho-analyst has, but the advantage of their ready availability is diminished by the fact that they generally betray neither the object nor the contact apparatus with which they are associated in the unconscious wish.

As a result of repression, the repressed object or apparatus in the wish may be replaced by another object or apparatus which has at least two properties: the property of being appropriate to the technique employed in the wish; and the property of being associatively connected on an unconscious or conscious level, or more usually both, with the repressed element. Substitute representations, including symbols, must possess these two properties. Thus a hazardous sexual achievement may be represented in dream, symptom, or sublimation, as the negotiation of a difficult task in terms of some technique not intrinsically sexual (that is, not consummatory), for example, the negotiation of heights, bodies of water, and so on. In a *New York Times* editorial (31 May, 1953) entitled 'Unconquered Goddess', the writer concludes, 'Mount Everest is the last natural citadel—and the most formidable. . . . Col. John Hunt, who headed this year's expedition, has a story to tell. It will be an epic that is bound to thrill millions who followed his struggle. The heroine will be that towering icy queen, with almost vertical rocky slopes, that to us is Mount Everest, to Tibetans "Goddess of the World"; the heroes will be men of the stoutest heart who have proved that . . . the stuff that made great soldiers and great adventurers still lives.' In neurotics, sexual anxiety may appear subjectively as anxiety appropriate to the technique selected to convey the instinctual need, and mild non-sexual anxiety evoked by actual technical difficulties—for example, exposure to heights, closed spaces, and so on—may be vigorously reinforced by sexual anxieties of unconscious origin so as to produce phobias. In terms of this discussion, a sublimation is an activity driven by instinctual forces in which the technique is preserved and the contact apparatus either eliminated, substituted, or modified. For example, in the case of mountain climbing, in the mind of the editorial writer at least, climbing is the technique for establishing an erotic contact with the love-object, specific references to the genitals, the breast, or the womb being eliminated. Such sublimations are responsible for setting the force of the libidinal instincts at the service of society so that a large proportion of this instinctual force is devoted to daily work. Work activities in general are less susceptible to neurotic impairment than libidinal relations but more susceptible than emergency responses.

In the case of the compulsive young man, his neurosis impaired his daily work slightly—not nearly so much as it impaired his libidinal relations. (His work was much impaired when he had a business partner, and he felt that his decisions could ruin his partner and starve the latter's family. Dissolving the partnership resulted in a marked improvement of working ability.) In fact, the bidding, buying, selling, and trading against competitors gave him considerable gratification even though, or perhaps because, there was no consistent libidinal object. The analytic material, of course, disclosed the libidinal significance of the activity. The aggressive techniques of forcing, squeezing, depriving, destroying, accumulating, appeared distinctly in fantasies about his work, as in libidinal fantasies and in fact, these techniques provided the links with which the relations between the two could be demonstrated in symbol, dream, and symptom. Because the techniques are not repressed they can carry a good portion of the instinctual drive and can afford a significant and fairly consistent measure of gratification, though alone they are not able to exhaust the instinctual force.

c. Apparatus

The only consciously admissible consummatory contact organs in many adults are the genitals of both partners. Other combinations are occasionally acknowledged and indulged. When repressive forces are not able to hold in complete check the combinations of contact apparatus which appear in unconscious wishes, these combinations may tend to distort the coital function by imposing on the genitals techniques more appropriate to other organs. The problem of controlling these instinctual forces may be more or less difficult and complicates libidinal activities at best. This is one of the favourite sites for the first signs of neurosis. The obsessive concern of the patient described, about infecting and being infected venereally in intercourse, betrays the anal distortion of genital function, i.e. injury by contamination. For this man, semen and vaginal fluid are at worst infectious, and at best soiling substances which can cause disease by contact. Despite the fact that the patient is dealing with genitals, he behaves as though the contact is anal, and this illusion impairs the consummatory act and with it the entire libidinal relation.

d. Role

It is common to encounter sets of wishes in which active, passive, and reflexive forms exist side by side, so that one may be used as a defence against another. Such active, passive, and reflexive sets may be constructed with the assistance of the devices of projection and identification and also with the assistance of autoerotic behaviour. Anxiety may terminate the attempt to gratify passive wishes and substitute active or reflexive wishes, while guilt may terminate the attempt to gratify active wishes and substitute passive or reflexive wishes. In different societies one of these roles may be more acceptable than the other two, and the attempt to restrain the less acceptable forms may interfere in libidinal activities: it is often a point of low resistance for the manifestation of neurosis. In the case of the compulsive man, there is so much anxiety and shame about passive wishes which are insistent

because of their infantile origin, and which offer surcease from the guilt evoked by hostile wishes, that he refuses to acknowledge them even in the most derived and innocuous forms. He will not, for example, admit that he is eager to be admired and loved by the girls he dates. Narcissistic wishes, on the other hand, are easily indulged. The fact that the wishes of both the infant and the female are passive, makes this man reject a passive role under any circumstances. Tinbergen observes that passivity, which he calls ' submissiveness ', is common to the attitude of the grown juvenile bird who has not yet left the nest and to the attitude of the sexually receptive female. In both cases the submissiveness has the function of appeasing the aggression of the male parent.

In brief, the capacity of the adult human being to devote a large proportion of his daily energies to constructive work flows from his ability to obtain partial instinctual fulfilment by indulging the technique of a primitive wish even in the absence of the contact apparatus. Those instinctually driven activities which are concerned with libidinal ties to a love-object pursue complete gratification by means of shifts in object, to a lesser extent in role and also in contact apparatus. This facility of shifting elements in the instinctual pattern is peculiarly human, and, together with the freedom from seasonal triggering, a freedom accomplished by repression and displacement, distinguishes human from animal erotic instinctual behaviour.

E. SUMMARY

I have attempted to review the theory of the erotic instincts and to include some original thoughts and some of the data of ethology. After describing displacement behaviour in vertebrates and proposing the existence of a unitary erotic instinct in mammals, comprising all instinctual behaviour in which a second individual of the same species participates, I have suggested that, in man, the progressive evolution in maturational sequence of patterns of instinctual behaviour is facilitated by the displacement phenomenon activated by an inhibition such as primary repression. A consequence of this type of maturation is that not only do the infantile patterns continue in an unremitting state of activity, but the adult patterns which supersede them and which are forced into action by the repression of the infantile forces remain constantly active so that instinctual behaviour in man is freed from the seasonal fluctuations which dominate the instinctual behaviour of the lower animals.

I have proposed further that instinctual drives and the primitive, unconscious wishes in which they are conceptualized contain the following elements: subject, object, contact apparatus, role and technique. Of these, the concept of technique is original, and it is discussed in detail. It refers essentially to the specific method by which the instinctual fulfilment is to be achieved. The combination of technique, role, and contact apparatus corresponds to instinctual aim in current terminology. It is peculiar to human instinctual organization that any of the series of elements in each category may be combined with any others in the other categories, depending on constitutional endowment and the individual's experience. Because of this tremendous variability in form and because of the consistency of activation, human instinctual behaviour is not limited to rigid patterns evoked intermittently by internal needs or to responses to external demands, but rather maintains a constant pressure leading to numberless varieties of constructive work and libidinal co-operation.

BIBLIOGRAPHY

(1) Beach, Frank A. *Hormones and Behavior.* (New York: Hoeber, 1948.)

(2) Benedek, W. T. *Studies in Psychosomatic Medicine: Psychosexual Functions in Women.* (New York: Ronald, 1952.)

(3) Bolk, L. *Das Problem der Menschwerdung.* (Jena, 1926.)

(4) Burns, E. *Sex Life of Wild Animals.* (New York: Rinehart, 1953.)

(5) Ford, C. S., and Beach, Frank A. *Patterns of Sexual Behavior.* (New York: Harper, 1951.)

(6) Freud, S. ' Dynamics of the Transference ', *Collected Papers*, 1912, **2.**

(7) —— ' The Unconscious ', *Collected Papers*, 1915, **4.**

(8) —— *An Outline of Psychoanalysis.* (New York: Norton, 1942.)

(9) —— (1905). *Three Essays on the Theory of Sexuality.* (London: Imago Publishing Co., 1949.)

(10) —— (1913). *Totem and Taboo.* (New York: Norton, 1952.)

(11) Klüver, H., and Bucy, P. C. ' Preliminary Analysis of Functions of the Temporal Lobe in Monkeys ', *Arch. of Neurol. Psychiat. (Chicago)*, **42** Dec. 1939, pp. 979–1000.

(12) Lorenz, K. *King Solomon's Ring.* (New York: Crowell, 1952.)

(13) —— *Man Meets Dog.* (London: Methuen, 1954.)

(14) MacLean and Delgado, J. M. R. 'Electrical and Chemical Stimulation of Frontotemporal Portion of Limbic System in the Waking Animal', *EEG Clin. Neurol.*, **5**, 1953, pp. 91–100.

(15) Nunberg, H. 'Synthetic Function of the Ego.' In *Practice and Theory of Psychoanalysis.* (New York: Nervous and Mental Disease Monographs, 1948.)

(16) Róheim, G. *Psychoanalysis and Anthropology.* (New York: Int. Univ. Press, 1950.)

(17) Schreiner, L., and Kling, A. 'Effects of Castration in Hypersexual Behavior Induced by Rhinencephalic Injury in Cat'. *Arch. Neurol. Psychiat.* (*Chicago*), **72**, 1954, pp. 180–186.

(18) Sillman, L. 'The Genesis of Man', *Int. J. Psycho-Anal.*, **34**, Part III, 1953.

(19) Tinbergen, N. *The Study of Instinct.* (Oxford: Clarendon Press, 1951.)

(20) —— *Social Behaviour in Animals.* (London: Methuen, 1953.)

(21) —— *The Herring Gull's World.* (London: Collins, 1953.)

(22) Weyl, S. 'Retardation and Psychoanalysis.' Read before the N.Y. Psychoanalytic Society, 1955.

(Received 16 October, 1956)

THE PRECOGNITIVE CULTURAL INGREDIENTS OF SCHIZOPHRENIA

By

JAMES CLARK MOLONEY, Birmingham, Michigan

In the earliest eras of human existence, man never considered himself distinct from the world around him. He never felt separated from the ground upon which he walked, or from the trees that brushed against him. He was at one with the wind that lashed his hair and the rain that wet his skin. He was mountain and he was himself. He was one with the sky overhead, with the ocean that rolled against the beaches, with the rocks that mounted on the reefs. He and nature were confluent. His past and his future were contemporaneous with the air he breathed. For him there was only today.

The rocks, the trees, the rivers, the mountains, the caverns, the oceans, and the hummocks of earth were alive, invested by man with a human spirit. Even the animals were human. In this world the lowly snake could come to represent a king, a god.

When the soft yellow haze of summer hung lazily over the plains and valleys, ancient man lived a life of serenity (6). It was turbulence that frightened him, and the intensity of his terror varied with the degree to which his world was disturbed. Earthquakes, avalanches, volcanoes, eclipses, floods, tidal waves were terrifying not only because they were severe but because they were unexpected, and to primitive man even these scourges of nature were human.

Not only did the violent upheavals of nature frighten the early man, but the day's minor changes aroused his uneasiness.

Fear, as in modern man, might be sudden in its onset, or a drawn-out matter—drawn out into a chronic state of tension. To define this latter state, I know no better word than 'suspense'. Suspense is unique. It is so unendurable that in the end it impels one to some sort of action. Man must either flee the source of his suspense or of his fear, or destroy the situation that frightens him.

The source of fear may not actually endanger life. An eclipse of the sun occurring at midday terrified primitive man. The gloom of night slowly and stealthily creeping over the damp earth created fears of lower voltage—created suspense. The primitives greeted night as if it were a horrific living being.

It is not my intention to catalogue all the kinds of supposed danger that beset earliest man. I am concerned here with those features of the sun, of fire, of light, and of darkness, that he considered hostile to his interests. And, to be sure, not all aspects of the sun, fire, and light were looked upon as threats to man. Often the sun was envisioned as a friendly agent.

Not in primitive times alone, but even today, the sun is a mother figure. Since World War II, Amaterasu, the sun goddess of Japan, has been known to most of us (11, p. 417). The earliest dwellers in Japan, the Ainu, worshipped a female sun (2, p. 63). Perhaps it is the sun's warmth that is its desired element, and the gender assigned to it is not intrinsically important. When warmth is the quality most cherished, the sun is actually a female, a mother figure, no matter though folklore and religion invest it with a male title and picture it as a male figure.

Vegetation and warmth are always associated in the minds of men. Lush tropical verdure is attributed to the heat of the equatorial sun. I take the following from a recent article by A. J. Levin (20): 'The relationship between . . . *Sodeh*—field—and . . . *Shodaim*—breasts—is rather clearly indicated. . . . The fact that the breasts and the fields are linguistically related is historical fact, since in the course of man's development the products of the field replace the milk of the breast as a principal source of food in the early childhood stage.'

There are so many literary allusions to the sun's rôle as a promoter and provider of vegetation usable as food that this needs little attention

here. The sun, Bacchus, and Ceres are mentioned in the same breath, and those of us who have eked out a frigid existence in the uttermost reaches of the north temperate or south temperate zones are aware of the sun's importance as the provider of warmth, green plants, nutrition—and hope.

There have always been sun-seekers who follow the sun, and have no tolerance for the miasmic glooms that sadden the foggy areas of earth's surface. The weak, the sick, the maimed —even people who are simply exhausted—seek to lie in the sun's embrace. Such pursuit of the sun doggedly persists even though it is known that, for some human beings, the rays of the sun are harmful.

The analogy of the sun with a mother is inescapable. Unfortunately, however, sunlight is not always available, and as the mother's breast often fails, so also may the sun. And this is frightening. It is not difficult to imagine the predicament of the helpless hungry infant unable to procure milk from his mother's breast. The more frightened he becomes the more he needs to be nourished—the more he needs the reassuring tender caress of his mother. The absent sun is needed for precisely the same reason; to dispel suspense—the suspense incurred by the threat of abandonment.

Babies resort to fantastic devices to alleviate the anxiety arising from the absence of the mother's breast. It seems evident that the oral incorporation of the depriving breast is a preferred method. Obviously the baby does not actually devour the frustrating breast. When denied nourishment or love, it becomes furious and attacks the breast with the toothless gums if teeth are as yet absent. Perhaps rage—excited by fear—is never present without the impulse to bite. Before the development of the conscious ego and its more accurate measuring devices, this biting leaves its mark in the form of an early memory of a mistaken feeling of having devoured the object of the rage. This is cannibalism.

Such a cannibalistic attempt to dispel suspense may be attended by a feeling of being larger than the object devoured. This feeling is representable by the phenomenon of micropsia. The object ' eaten ' is now contained within the cannibal, surrounded by his body. In a fantastic sense it is now subject to the cannibal's will. No longer is the breast an elusive outside object that frightens not only because it is unobtainable, but also because of the ferocity of the reflex reactionary rages occasioned by its absence. Where there is no oral inter-relational harmony with the breast, the cannibal, by devouring the breast and depositing it in the prison of the colonic labyrinth, develops the illusion of an anal autonomy. The breast is a metonymy for the mother; so oral incorporation comes to mean the introjection of the mother.

This sounds fantastic. But I hope to illustrate the point so adequately that no doubts will remain in the most sceptical mind.

There are two methods by which the child attempts to rid himself of the suspense occasioned by an unresponsive mother. At times he devours the mother; at times he allows himself to be devoured by her. Perhaps because he is used to being devoured by the mother, he prefers this way of escaping from anxiety. In this special relationship between the two—i.e. when he feels he is being devoured by her—the infant entertains a feeling of smallness compared with the mother, who seems gigantic. Such a relationship with the mother's size is analogous to the phenomenon of macropsia.

It is not for us here to determine why some individuals feel larger than their mother, and thus are able to devour her, while others feel smaller, and thus are able to be eaten by her. I would hazard a guess, however, that the cannibalized mother is a ' willy-nilly ' mother who actually makes very little impression upon her offspring except for the psychic residue left by her absence. The big, devouring mother, on the other hand, never fails to impress her child with her mammoth size and power and the consistency of her demands upon him. In each instance the impact with the mother takes place before the ego is well enough developed for the child to evaluate and integrate the mother's actual meaningfulness to him.

Many readers will doubt whether any human being is accustomed to being eaten up by the mother. However, I will defer till later in this article the proof that some individuals allay anxiety by a fantasy of being devoured by the mother figure.

The destiny that befalls the mother befalls the sun also. The sun in some circumstances was devoured by the primitives, and in others the primitives were devoured by the sun.

Either position, that of devouring the sun or of being devoured by it, presupposes the absence of the ego boundaries. This is characteristic of primitive existence. Early man's

coevality with his natural environment has already been described (21, p. 2). From this, one might conclude that modern man does not suffer from an undefined self, and that he at all times knows himself to be distinct from the objects and persons in the world around him. This is a naive assumption.

* * *

Skin contact with the mother, particularly with a motherly mother, advances the development of the skin ego. An accurate and objectively correct memory picture of the skin surfaces —in substance, an accurate memory picture of the body boundaries—is indispensable to the development of a sense of reality. To promote the proper memory picture of the body boundaries, the mother should stimulate all the baby's skin, not merely those areas (such as mouth, anus, vagina, urethra) which, owing to their physiological functions, call forth specific and exaggerated maternal attention. All the baby's body surfaces should be stimulated, fondled, and caressed by a relaxed, motherly mother. The very young baby should be held against the mother's bare skin; for there is perhaps no other way in which the reality of the mother's body is so accurately and consistently registered by the child. Consistent contact with the mother's body provides, through the sensory end-organs of the baby's skin, a valuable and unchanging picture of her actual texture. So important is the skin ego—the memorable skin schema—that everything possible should be done to develop it.

Still speaking of our own culture, let us indicate what may occur in connexion with the baby's other senses, in order to emphasize the importance of consistent skin contact between mother and infant. In the case of the visual sense, the light rays striking the rods and cones of the child's retina are neither the mother herself, nor even a properly consistent fetishistic substitute for her. When the light rays are reflected upon the baby's retina the child may be confronted with a confusing variety of mothers: bare-headed or hatted, rouged or unrouged, clothed or naked—some so extremely different from previous images that the baby may not even recognize them as being the same person he has previously seen. Moreover, the source of light may alter the mother's appearance. She may be presented to the child's eye as an effulgent being one moment, a silhouette the next.

Thus, through the visual sense alone, the baby draws a constantly varying, potentially inconsistent, and hence incomplete fetishistic representation of his mother.

The same situation exists in the case of the olfactory sense. The sensory end-organs in the mucous membrane of the infant's nose may be presented, as in the case of the retina, with fragmentary and conflicting fetishes for the mother, since only the odours which emanate from her, not the mother herself, are actually present at the mucous membrane surface. The baby may feel that he is surrounded by a swarm of mothers: the ' B.O.' mother, the ' Yardley ' mother, the ' Palmolive ' mother, the ' Pears ' mother, confusing in the inconsistency of their various smells.

Once again, through the auditory sense, according to the changes wrought by the mother's varying emotions and even her clothing, the baby may draw from the sounds of her voice and dress another confusing series of impressions, other fetishistic representations of a variety of mothers: the angry-voiced, the contrite and dulcet-toned, the silent wool-clad, the rustling taffeta-clad, the crackling starched cotton-clad. The sounds may be distant or near-at-hand or an angry outburst at 50 feet, followed by contrite murmurs in the baby's ear.

If the mother is not a breast-feeder, even the taste of her, as conceptualized by the baby's formula, may change with every feeding.

Whether the mother is represented to the baby through eye, ear, or nose, if he is not also in frequent contact with the mother's skin, he does not experience the real mother. However, when the skin of the infant is thoroughly stimulated by contact with the motherly mother's own body (and not merely by a ray of light, an odour, or a sound wave), there is a consistency and reality in the relationship which undoubtedly advances the adequate development of the child's body schema memory. The texture and temperature of the mother's skin varies little from one contact to another. Because of a skin-to-skin relationship with the mother which is consistent and real, rather than fetishistic and full of vagaries, the baby's sense of reality, his efficient skin ego, develops properly.

However, this ideal relationship between mother and child is seldom found. Frankly, there is nothing that the child can do actually to materialize the hallucination of the absent or physically removed mother in a concrete or

tangible way at his eyes, ears or nose (unless it is to smell his own faeces in connexion with coprophagia or coprophagic fantasies as outlined by Spitz (27). However, the child *can* implement the hallucinations of the absent mother at the skin merely by some sort of self-caressing. It is not surprising that the absent mother induces two major types of self-caressing and self-fondling that are more universally represented than others. I allude to thumb-sucking, in which the child's own thumb becomes a substitute for his mother's breast, and to infantile masturbation.

It is not at all strange that masturbation should play an important part in self-mothering or self-fondling, because the exquisiteness of the genital sensation and the accessibility of the genital organ forms an excellent preconscious substitute for maternal satisfaction, the need for which is occasioned by the mother's absence.

During early infancy when the sensory channels are unevenly and inadequately stimulated the nascent ego is fragmented. Each ego-fragment becomes invested with an autonomy that is conceived as being holistic by the part of the memory process representing the autonomous fragment. In considering fragmentation we might think of vision ego, smell ego, hearing ego, taste ego, or feeling ego.

In these circumstances, since the ego is not knit into a structured whole, there is no memory-represented structured whole. Consequently, distortions and fragmentations occur in the memory body schema, and one fragment can become a representative for the whole or for another part of the ego. The eye ego, for instance, can represent the mouth ego; such terms as 'I devoured her with my eyes', and other similar phrases abound in all languages and demonstrate the widespread nature of this psychic phenomenon.

Using the skin as a self-mothering, self-caressing device provides a pattern for the process of materializing the mother. It is clear from information gained from schizophrenics that most of these individuals can make a flash contact with or become momentarily aware of the significant outside person, object, or situation and then quickly identify with their own inner significant object, person, or situation, so that the real, external thing becomes practically non-existent. To fend off anticipation of another dreadful experience (such as loss of the mother) which might occur if an actual relationship were established with another person, the individual *becomes* the other person as well as being himself. He meets the situation in a flash by a repetitive employment of the same antidote that was used during the helpless days of his infancy to neutralize the baleful dependence upon his mother when he first discovered her frightening unpredictability. The antidote, in fact, is in keeping with our traditional understanding of psychodynamics and actually represents the biograph of the individual's first effective method of meeting and dealing with maternal rejection. He duplicates a longitudinal section of his history after the initial part of the picture is vitalized by contact with some meaningful person.

All analysts have seen patients fight off transference by some typical and personalized self-indulgence. During the analytic hour this self-indulgence may be represented by smoking, massaging the forehead, rubbing the arms, wringing the hands, leg-wriggling, and so on. Outside the hour the transference may be opposed by precipitation through an acting-out of the original narcissistic devices. These devices may be represented by increased drinking, masturbation, sexual promiscuity, excessive eating, excessive smoking, and so forth.

Although I shall not enumerate all the processes by which I have arrived at these concepts, it is my opinion that the actual presence of a relaxed, motherly mother is necessary to provide the general skin-massage that is all-important to the development of a skin-ego or body-schema. From this general fondling the baby develops a proper memory image of his body surfaces, which in turn affords him an accurate picture of that which is not a part of himself. A proper memory image and adequate skin-ego provide him with an accurate knowledge of spatial relationships. Without it he will resort to the earlier narcissistic techniques of replacing the mother with a part of himself.

In this connection Piaget says: 'The hereditary factors of the first group are structural and are connected with the constitution of our nervous system and of our sensory organs. Thus we perceive certain physical radiations, but not all of them, and matter only of a certain size, etc. Now these known structural factors influence the building up of our most fundamental concepts. For instance, our intuition of space is certainly conditioned by them, even if, by means of thought, we succeed in working out trans-intuitive and purely deductive types of space' (23).

To elaborate, it can also be said that there is no doubt that individuals can ' caress ' their own ears by their own efforts. They may talk, hum, or whistle to themselves, enhancing the narcissistic effectiveness of such endeavour with appropriate daydreams. This is perhaps no different in its basic intent of providing security from caressing of one's own skin. We might concede that humming, whistling, or singing to oneself provides an ear-caress, an ear-comforting such as was originally provided by the mother. In fact, one of my patients, whenever she was in a difficult situation that caused her to desire the presence and assistance of her efficient mother, would hum Brahms' *Lullaby*. Her mother had sung it to her as far back as she could remember; now *she* was both mother and child—the mother who sang the lullaby and the child sung to by the mother. In her time of need she played both parts.

As has been implied above, this ear-indulgence of humming to oneself occurs when an especially suited or predisposed personality is confronted with a situation that calls forth a need for the mother who is not there. The predisposed individual plays the part of the needed mother by humming to himself. It might just as well have been a need to taste food or alcohol, to inhale tobacco smoke, to massage his own forehead, to scratch his own itching, to smell perfumes (or his own faeces), or to masturbate. These actions all have the same significance—the need to mother oneself for security's sake. It is not surprising that a hummer who has lost himself in a tune is at times just as embarrassing and annoying to similarly disposed rigid individuals as a masturbator who masturbates in public.

* * *

The foregoing remarks on self-indulgence are intended to indicate a trend. In this paper, however, I am anxious to indicate the similarity or connexion between cannibalism and seeing the light of the sun, and/or being seen by the sun.

As I have said, in those individuals who have not enjoyed a warm and intimate skin relationship with a motherly mother's skin, distortions in the reports of the four senses develop as a consequence. When the sensory end-organs of the skin of the entire body are not adequately stimulated, of the four senses actually in use undoubtedly the sense of sight offers the most important avenue of linkage between the mother and her child.

In fact, if the infant's skin is not caressed and touched by the mother's skin, the eye may assume astounding properties. For instance, if the child utilizes a phantasy of devouring the elusive mother and still has no skin contact with her, the devouring is accomplished by the eyes. Because the eyes are more stimulated than any of the other senses, they become involved in the gestalt and in the memory of the act of incorporating the mother.

In my opinion, the fact that the senses are still dissociated and are not integrated by the skin sense, offers a real problem for the infant in his attempts at maturation and homeostasis. This is particularly significant when we realize that the baby is incapable of gaining security through looking at the mother during the earliest days of his life, because he is blind, or, more accurately, has not yet learned to focus.

At any rate, the capacity to use the eyes to devour the mother can be and has been employed against the sun. The person who attempts to devour the sun must feel himself larger than the sun. This artificial emotion stems from the dissociation of the senses and from a consequent distortion of the feelings stored as memories, and brings about a situation analogous to micropsia.

But before turning to the matter of eating the sun or being eaten by it, it is necessary to know a little more about the mother-child relationship. We must understand quite thoroughly the concept of the mother as a cosmos before we can understand the concept expressed by the phantasy of eating up the sun. It is not enough to dispense with the transitions with a wave of the hand by saying that the cannibalized sun is analogous to the mother's cannibalized breast. We must also understand the intermediary dynamics of the relationship of mother to infant which clarify the psychic evaluation of the sun as a breast. Piaget says: ' Verbal or cogitative intelligence is based on practical or sensorimotor intelligence which in turn depends on acquired and recombined habits and associations. These presuppose, furthermore, the system of reflexes whose connexion with the organism's anatomical and morphological structure is apparent. A certain continuity exists, therefore, between intelligence and the purely biological processes of morphogenesis and adaptation to the environment ' (23).

The term cosmos may confuse some readers, because it usually connotes majestic spaces,

comets, stars, interplanetary systems, the universe, and even the fourth dimension. However, there are tangible concrete reasons for including the concept of the cosmos as a mother in human evaluations. To quote Freud:

'A child's first erotic object is the mother's breast that feeds him, and love in its beginnings attaches itself to the satisfaction of the need for food. To start with, the child certainly makes no distinction between the breast and his own body; when the breast has to be separated from his body and shifted to the "outside" because he so often finds it absent, it carries with it, now that it is an "object", part of the original narcissistic cathexis. This first object subsequently becomes completed into the whole person of the child's mother, who not only feeds him but also looks after him and thus arouses in him many other physical sensations pleasant and unpleasant. By her care of the child's body she becomes his first seducer. In these two relations lies the root of a mother's importance, unique, without parallel, laid down unalterably for a whole lifetime, as the first and strongest love-object and as a prototype of all later love relations—for both sexes' (12, pp. 89–90).

It is evident, from the welter of evidence already accumulated, that the infant at first is incapable of distinguishing his mother from himself. If the mother for any reason whatsoever causes any type of consistent disturbance to her newborn, she paralyses the infant's outgoing efforts, obstructs his maturational emancipation from herself, and prevents him from developing clear-cut ego-boundaries.

When the mother does not provide the proper dosage of maternal love, fails, in short, to provide the proper maternal climate, the maternal aspects of the primary unit (mother-child) become psychically adherent to the child's body. The mother is not, as it were, peeled off from the child's skin. The resultant memory of the skin picture is, in certain areas, that of the earliest relationship with the mother—a memory of the time when the child did not consider his mother as distinct from himself.

As I have pointed out, such a maternal disturbance of the child's skin memory occurred before the development of the conscious aspects of the ego. Using the term 'maternal disturbance' implies a much stronger and perhaps even a more sinister meaning than 'lack of proper maternal dosage' (31, p. 67). If the mother is mature and is not agitated by an adverse reality, she will neither neglect the infant's needs nor smother it with unwanted attentions. She will supply the proper dosage of mother-love, her motivation springing from her heart rather than from her mind. A proper mother permits her newborn to attempt new skills. After a period of trial the child may fail to accomplish the task he has set for himself. A proper mother will watch for a signal that he wants some help from her. When signalled, she will come to his aid. This is an example of correct maternal dosage. The mother neither neglects the child nor smothers his efforts to learn for himself.

If these observations seem repetitive, I would defend the repetition on the grounds of my concern that the reader becomes fully convinced of the dynamic aspects of the process of normal maturation, and normal emancipation from the mother. In normal maturation the child becomes aware that he is 'self' and that his mother is 'not self'. I shall elaborate later on the fact that, more accurately speaking, anything that has been once experienced is never again exactly and completely 'not self'.

When a maternal disturbance occurs before the advent of consciousness, the child develops serious defects in his feelings about what is 'self' and what is 'not self'. The 'not self' (mother), if regarded as unassailable and incapable of being controlled or influenced, is still felt to be in some way a part of the self or at least not wholly 'not self'. It may be conceived as beside the self—as witness the expression, 'I am beside myself'. The memory of the skin surfaces under faulty maternal conditions contains intermingled 'self' and 'not self' elements. The 'not self' is not peeled off from the 'self'. Because these actions are preverbal and even preconscious, this memory area becomes practically inaccessible. Through continuing growth the development of memory representations of mother systems by-passes the defective skin memory system. And, unfortunately, the proper skin ego is seldom recaptured and reconstructed into its proper relationship with other body memory elements that go to make up the total memory system. Because of the disturbance in the memory skin-ego representatives, defective spatial relationships with outside objects also occur.

There is another reason why spatial relationships with things in the outer world are defective. For ultimate clarification, the dynamics of this

other reason will have to be developed step by step. Some of these steps are analogous to or parallel with the steps or procedures that occur in depersonalization. Before experiencing the depersonalization, the predisposed individual exhibits herself to another person. In the case that I have in mind, the woman, a model, exhibited herself to a man. Then she would make a flash contact with the man she had elected to become the voyeur of her body. At that precise moment she became the man who gazed at her, as well as being the woman gazed at by the man. She usually preferred to exhibit her buttocks. This trend of events always culminated with the woman feeling depersonalized. This depersonalization is important to remember, in order to understand one particular aspect of the concept of the cosmic mother.

To prepare the foundation better for an understanding of these dynamics, I will describe an analogous situation that occurred in the case of the son of one of my patients. The mother, my patient, was quite schizoid, though her schizoid trends were not of institutional magnitude. She preferred her own company. In privacy she nursed herself with the 'milk' of her own daydreams. She resented intrusions upon them. She gave perfunctory attention to her duties, completing them as soon as possible so that she could go back to her self-nursing through the employment of masturbation and fantasy. She did not want her little son around because he interrupted the formation of her fantasies.

Early in infancy the son recognized her rejection of him. It was noted that when he was five months old, even though he was a breast-feeder, he would put his thumb in his mouth whenever the mother took him into her arms. From my own observations of other similar situations, I assume that the baby, even at this tender age, became a mother to himself through his thumbsucking activity. He became the mother who put the breast (thumb) into his mouth and also the baby who sucked on the breast (thumb). He had a world all to himself. This act of self-mothering occurred whenever the real mother picked him up, to short-circuit his mother out of existence. He became a mother to himself. It is obvious that at this time in the child's life he had not differentiated his mother from himself. The mother existed at his own skin; there was no space intervening between himself and her, or at least between himself and herself in his psychic reality, in his psychic evaluation of the mother-child primary unit.

* * *

In the current and past considerations of the concept of the cosmic mother, it seems obvious that the subject of mensuration of the outer world has not been given sufficient attention. There are many comparisons that warrant further study, such as larger than, smaller than, nearer than, farther than, lighter than, heavier than, blacker than, earlier than, later than, etc. The comparison considered in this frame of reference must be a standard, that is, it must be a standard in so far as the individual is considered. It is a standard for comparison. It is a fixed point or orientation point that is used by the individual for the purpose of testing an unknown so that he may arrive at a more accurate knowledge of either the intrinsic or borrowed nature of that unknown.

Therefore a standard must be established in the memory that can be utilized in making a comparison. Is an object farther away, or is it much smaller? Is a person early for a meeting, late for a meeting, or on time, or he is earlier than John Brown, or later than Tom Smith? To solve these seemingly simple problems, it is necessary to consider the mind at birth. The mind at birth is a blank slate. There are then no standards that can be used for making comparisons, because the existence of standards has not been experienced and they have not been retained as memorable situations. In the precognitive mind the ability to measure has not been established because there are no standards to be used as comparisons. The differentiation of what is 'self' from what is 'not self' has not yet occurred. Consciousness with its better integration provides means for making measurements. Because of the consciousness, reason can be employed to evaluate time and space interrelationships. Using a concept that had been previously taken into the mind, the consciousness can establish by the intellectual process what is larger or smaller than the self. The intellectual process can determine whether the individual is late or early for an appointment.

However, this does not mean that these space and time evaluations will receive from the emotions an approval of the answer given by the intellect. This is important because it means, and this has been affirmatively established, that a person can think one way about something and feel another way about the same thing. A

person can intellectually know that he is physically larger than his father, but at the same time the information from his emotions will establish the opposite state of affairs, will establish that he is smaller than the father. This situation of knowing one thing and feeling another is applicable to the mind after it has established the means of evaluating the environment and after it has established consciousness.

However, before the original standards or concepts have been stored in the memory, having been imprinted upon the blank state of the cerebral cortex, there is a precognitive existence that represents a togetherness with the mother. If this existence is traumatized, a paralysis of the maturative expansiveness of the individual may result. Because the trauma occurs precognitively, the individual is not provided with the means, with the instruments for the measurement of the adversary—the mother. The reactions primed by the mother are not discriminations; they are rather a reflex holistic type of response. Because of the absence of the necessary tools for measuring time and space relationships, the mother is emotionally felt to exist in some special kind of juxtaposition to the baby, the kind of juxtaposition being determined by the predominant nature of the relationship which was congealed or solidified in the baby's memory by the traumatic experience. The baby is trapped in a gestalt in which all the significant agents and presences are represented, and the trap contains a natural tendency toward immutability and can be set in action or sprung by either one or all of the agents or presences that are meaningful in the gestalt.

In consequence of the gestalt that is precipitated before the advent of cognition, there persist emotional feelings towards the outer world, that are now calibrated by the measuring devices of consciousness. Even if these tools are present, the feeling tone toward the world might be one of frustration, fear, and/or anger. These feelings, which are for the most part linked in some sort of inseparable unity, are present even though the intellect reports that there is no need to feel frustrated, frightened, angry. It is a matter of feeling tone, and this feeling tone takes precedence over the intellect. It is the same feeling that the individual entertained as a baby toward the mother. The feeling that was hostile precognitively, and may well have been associated with fanciful notions of mastery through oral incorporation, is hostile post-cognitively. In the post-cognitive era, the continuity of mother becomes invested in the world that is at one's skin or at one's fingertips. Special variations in the relationship with the mother might feature an eye, an ear, a skin, a smell, or a taste dominance. The dominance, regardless of its type, is a perpetuation of the precognitive featured relationship with the traumatizing mother.

After the world at the fingertips has become the continuity of precognitive mother, the world becomes the cosmic mother. Special features of this cosmic mother might again be featured, as the featuring took place in the precognitive era. If the eyes are precognitively featured as the important connecting links with the precognitive mother, then the sun, the source of light, will become meaningful as one of the cosmic mother's most significant aspects. Attempts at controlling the sun will follow the same patterns by which the individual attempted eye control of the mother. And, as we shall see, this attempt at eye control of the mother, cosmic mother, the sun, might lead, in those individuals who are existentionalistic because of the absence of reconstructed ego boundaries, to the delusion that they have devoured the sun.

The ancient concept of participation (17, 9, 10), naturally involving ideas of animism, employed the psychic processes of projection and displacement. Because of the projection of animal deglutition upon astronomical phenomena, that physiological process is recoverable in the ancient myths that deal with the swallowing of the sun.

The absence of the sun struck terror into the hearts of the ancients. To rid themselves of this, they needed to account for nocturnal and eclipse absences of the sun. Accordingly, they subjected the sun's absence to a kind of ritualistic compulsive doing and undoing. To provide peace of mind the absence of the sun was accounted for and congealed into a myth and thereby ' controlled '. The ancients ' superiorized ' the sun. They believed that they could predict its course and its destiny. They accounted for its absence by believing that it was devoured by an animal, a god, or a human being. The sun reappeared in the sky each morning after having seared its way out of the animal's entrails.

Róheim (24, p. 164) cites an Eskimo tale in which the hero (in my estimation, the sun) disappears down the open mouth of an ice-

covered bear (the darkness of night). When the hero emerges from the bear, he is hairless and scalpless. This, in my view, refers to the baldness of the early morning sun, which is without rays (hair). Referring to W. Jockelson's *The Koryak*, Róheim says: 'A Koryak myth relates the tricks played by Miti (his wife) on Creator. She lay down on the ground spreading her legs upward. She thrust her head into the snow and grew so large that she obstructed the way. Creator went right into her anus as if it were a house. While in her anus he became bald-headed' (24, p. 165). This myth, to Róheim, has phallic significance. To my mind, however, in the light of the concept of the sun's being regarded as *Creator* in many early religions, this myth is an indication of the entry of the sun into the alimentary tract (anus) of the wife, here symbolizing the darkness of night. Note, again, that upon reappearance through the supposed moving of the bowels of darkness, the creator or sun is bald, or ray-less, like the sun at dawning.

Róheim further relates: 'Kamakaju in Ysabel cuts himself out of the inside of a kingfish and when he gets out he says "Where am I?" At that moment *the sun rises in the east*, and tells Kamakaju, "Don't get into my way or you will be burnt." He follows the sun up to the sky and he teaches the sun's children to eat cooked food' (24, p. 165). The implication seems clear that the kingfish represents darkness, and there is an equation of the hero with the sun, since they emerge simultaneously. Especially in the light of this equation, I find an alimentary significance—the sun devouring, or being devoured—in the reference to food.

I offer a substitute interpretation for the one Róheim places upon the Chilcotin and Shuswap myth of Little Dog: 'Little Dog [sun], warned by his wife not to go in a certain direction, disobeys and is swallowed [here an oral implication] by a moose [the darkness of night] standing in the middle of the water. Little Dog makes a fire [sun's fire or light] inside, cuts the animal's heart out and eats it, thus killing the moose [i.e. the mother (darkness) dies when the sun gets out]' (24, p. 165). There is also, in the myth, a reference to Little Dog's approaching a stone door which shuts and opens, which I interpret as a reference to alternating day and night, or sunlight and darkness (24, p. 165).

The Ainu tell the story of the devil that planned to eat the sun. 'When God created the world the evil one did all he could to frustrate His designs, especially with regard to human beings. Now, after all things were made, the devil perceived that men could not possibly live without the light- and warmth-giving sun. He therefore made up his mind to destroy that beautiful and useful work of creation, and thereby injure men. So he got up early one morning, long before the sun had risen, with the intention of swallowing it. But God knew of his designs, and made a crow to circumvent them. When the sun was rising the evil one opened his mouth to swallow it; but the crow, who was lying in wait, flew down his throat, and so saved it. Hence the crows, remembering the benefits they once conferred upon the human race, have an idea that they may do just as they like with men, and live upon the food they provide for the sustenance of themselves and families' (2, pp. 68–9).

Maui, a Polynesian of heroic proportions, trapped and beat the sun until it was crippled. 'Maui "observed that the time between the sun's rising and setting was very short, and he said to his brothers, 'Let us tie the sun, that it may not go so fast, that man may have time to provide food for himself.' But his brothers said, 'Man cannot go near to the sun on account of the heat.' Maui said, 'You have seen the many acts that I have performed. I have taken the form of a bird, and again resumed that of a man, while you have ever had the form of men. And now, my brothers, I can do what I propose, and even greater acts than this.' His brothers consented, and commenced to plait ropes. . . . When these had been made Maui took his weapon, made of the jaw-bone of his progenitor . . . and his brothers took their weapons and the ropes, and they . . . journeyed till they had got near where the sun came up. Maui, addressing his brothers, said, 'Beware you do not surprise and unnecessarily startle the sun; but let his head and shoulders be fully within the noose, and be ready when I call to pull the opposite ends of the ropes. When the sun is caught, I will rise and beat him. But let the ropes be securely fastened that he may be held for some time. And, O young men! do not heed his cry of pain. Then we will let him go.'"

'"The sun came up like blazing fire, and when his head and shoulders had entered the noose Maui encouraged his brothers to action by saying, 'Now pull.' They did so, and the sun drew his limbs together with a twitch. Maui rushed at him with his weapon, and scarce had the sun time to call before Maui was belabouring

him, and continued to do so for some time. When they let him go he went away crippled, and in the anguish of his pain he uttered another of his names, Tama-nui-a-te-ra (great child of the sun), and said, 'Why am I so beaten by you, O man? I will have my revenge on you for having dared to beat the great child of the sun.' He departed on his way, but was unable to travel so fast as before." ' (7, pp. 45–6).

In more than one myth the sun escapes from the belly of night or of Hades by his own aggressive action. This latter idea is presented in many of the myths described by Róheim, and in this Zulu myth unearthed by me:

'A . . . very curious conception of the spirit-world is found in the Zulu tale of *Unanana Bosele*. Two children and afterwards their mother were swallowed by an elephant. "When she reached the elephant's stomach, she saw large forests and great rivers, and many high lands; on one side there were many rocks; and there were many people who had built their villages there; and many dogs and many cattle; all was there inside the elephant; she saw, too, her own children sitting there."

'In short, as Tylor points out, it is a description of the *Zulu Hades*. . . . Instead of being released by a deliverer from outside, the woman cuts her way out of the elephant after feeding, with her children, on his internal organs. . . . And it came to pass, after a long time, that the elephant died' (32, pp. 198–9).

In my opinion this mother represents the sun. The elephant represents darkness, and its inside the gastro-intestinal tract of darkness. The elephant dies because darkness dies with the dawn of a new day. It dies when the sun escapes because it is the night, the darkness that disappears with the break of day.

The records contain other instances in which a mythological character has been swallowed by some type of animal. In these instances baldness and light play a prominent part. In relating these particular myths in which the swallowing of the central character is featured, the story of Jonah is described. Jonah was swallowed by a huge fish after he was tossed into the sea. Jonah was comfortable inside the fish because its stomach was large and there was a huge diamond (sun) in it that gave light. Later Jonah was transferred to another fish whose stomach was small and crowded with little fish. This fish vomited Jonah on to dry land (19, pp. 556–7).

And another sun myth is as follows: "... presently the Sun would bring it to pass by taking flesh in the womb of a virgin in the village of Gaucheta [Colombia, South America], causing her to conceive by the rays of the sun while she yet remained a virgin. These tidings were proclaimed through the region. And it so happened that the head man of the village named had two virgin daughters, each desirous that the miracle should become accomplished in her. These then began going out from their father's dwellings and garden-enclosure every morning at the first peep of dawn; and mounting one of the numerous hills about the village, in the direction of the sunrise, they disposed themselves in such a way that the first rays of the sun would be free to shine upon them. This going on for a number of days, it was granted the demon by divine permission (whose judgments are incomprehensible) that things should come to pass as he had planned, and in such fashion that one of the daughters became pregnant, as she declared, by the sun. Nine months and she brought into the world a large and valuable *hacuata*, which in their language is an emerald. The woman took this, and, wrapping it in cotton, placed it between her breasts, where she kept it a number of days, at the end of which time it was transformed into a living creature: all by order of the demon. The child was named Goranchacho, and he was reared in the household of the head man, his grandfather, until he was some twenty-four years of age." Then he proceeded in triumphant procession to the capital of the nation, and was celebrated throughout the provinces as the "Child of the Sun" ' (5, pp. 309–10). Freud comments on a similar set of dynamics (13, p. 291).

Other evidences of animism derived from the primitives' observation of human physiology are to be met with in historical, mythological, and religious records. The ancients knew that if something is swallowed by the body, it must of a necessity reappear again on the outside of the body. If the sun does not reappear as a result of its having burned its way out of the entrails of darkness, it reappears outside the body of darkness as a defecation or as a birth.

The following also refers to the animistic concept of the gastro-intestinal tract as darkness. But in this instance the sun passes under the earth. '. . . that the sun crosses a vast sea to reach the east was also known to the Armenians. . . . It is on this journey that the sun shines on the Armenian world of the dead as he did on

the Babylonian Aralu and on the Egyptian and Greek Hades. The following extract from an Armenian collection of folklore unites the sun's relation to Hades and to the subterranean ocean: " And at sunset the sun is the *portion* of the dead. It enters the sea and, passing under the earth, emerges in the morning at the other side " ' (1, pp. 49–50).

To be sure, abstract connotations of devouring in general and in particular of the sun being eaten up by the darkness are rife in the annals of mythology. I make no attempt to exhaust this aspect of the legendary records on animism. To illustrate the point in question, however, more examples are cited.

'. . . its obvious explanation is identification with Khnum, the guardian of the waters coming from the lower world and master of Hades. The sun at night-time is lost in Khnum's dark realm and unites with him ' (22, p. 28).

'. . . the sun may also be thought to hide himself in the body of the heavenly cow during the night; so that he enters her mouth at evening and is born again from her womb in the morning ' (22, p. 36).

The sinister aspects of the bowels of night are even synonymous with the dead aspects of filth and decay. ' As everyone in the spiritual world has garments in accordance with his intelligence, that is, in accordance with truths which are the source of intelligence, so those in the hells, because they have no truths, appear clothed in garments, but in *ragged*, *squalid*, and *filthy garments*. . . .' (30, p. 99).

'. . . we hear now of hell [which is the channel of night as derived from the animistic concept of the gastro-intestinal tract]: The *Atharvaveda* tells of it as the Nāraka Loka (in contrast with the Svarga Loka, the place of Yama), the abode of female goblins and sorceresses, the place of blind or black darkness. It is described in slight detail in its horror in that Veda (v. 19) and fully in the *Satapatha Brahmana* (XI. vi. I), where Bhrgu, son of Varuna, sees a vision of men cutting up men and men eating men . . .' (18, p. 100).

And again the familiar theme is encountered: ' Yudhisthira, the only one of the Pāndavas to attain alive to heaven, was submitted to a final test before being permitted to join his brothers and the other heroes of old. Through illusion he was caused to see the tortures of the damned, for " hell must necessarily be seen by all kings " (*Mahabharata*, xviii. 27 ff). Passing through the *repellent horrors of decay*, Yudhisthira stands aghast at the torments which he beholds ' (18, Pl. VIII).

I do not want to burden the reader with repetitions, but I wish to repeat that darkness, hell, and the insides of the gastro-intestinal tract are identical. Illustration after illustration of this theme is recoverable from the records (3, p. 365; 30, p. 390; 22, p. 39; 2, pp. 68–9).

One significant myth, dealing with the animistic concept of night as a colon, was recovered from Ainu records.

' Another legend . . . tells us that when the dogs [of Hell, Hades, Nether World] on one occasion discovered in the world of the departed a ghost [sun representative] from the upper world, they set up a great howling. Upon this the inhabitants, including the father and mother of the ghost, made offerings to *inao*, and set the refuse of their food outside the east end [where the sun rises] of the hut for the ghost to eat. He was very angry at having such dregs offered to him, and endeavoured to knock it all away; but the filthy stuff only flew into his bosom, and he could not get rid of it, try how he might. It was only after he emerged into the upper world of living men that the refuse offered him could be got rid of ' (2, p. 572).

Rather than become involved in any argument about what constitutes a religion and what a schizophrenic delusion, I content myself with describing certain schizophrenic *processes* that are analogous to the sun-devouring myth material of the ancients. These instances are excerpted from my own files and from biographical material occurring in various cultural records.

A patient believed that there was a searing white-hot ball in his chest. Its periphery was a contracting iron that contained the gaseous interior, threatening to expand and to break its restraining membrane. At times the patient believed that this ball occupied his brain.

He was never certain how the ball got into him. But he did recount an instance when he was poisoned by an exposure to the sun. And, as a matter of fact, he often experienced distress after he had been out in the sun. The distress did not occur immediately. Sometimes the reaction was delayed for several days.

The patient believed that the searing ball within his body was the sun! At times he believed that the metal covering was not only cooled by his own body fluids, but that the cooling body fluids made the outer metal membrane contract. On other occasions his

interiorized sun was surrounded by either a mailed fist, or a fist without mail. The first was discipline that controlled and contained the white fire ball, the sun. The interiorized sun, the interiorized white fire ball, were his rampageous emotional feelings that threatened to break their bonds.

At times the sun was like a red ball, like the sun on a horizon. At other times, the incorporated red ball was like the electric light, an accoutrement of his nursery that could be shattered or could not be shattered. Even any contact with a realistic pain source developed within him the sensation of a searing white-hot ball.

Feodor Moor, early in the nineteenth century, was a captive in Japan. Later, on return to Russia, in desperation he shot himself through the chest. When he was found ' his body was opened, and in the breast were found two pieces of lead, with which, instead of balls, he had loaded the musket. He had left on a table in his apartment, a paper containing the following singular expressions: " That life had become insupportable to him, and that, at certain times, he could even fancy he had *swallowed* the sun " ' (14, pp. 216–17).

Feodor Moor's delusion that he had devoured the sun is particularly pertinent to this study. Moor, with his master, Captain Vassily Golownin, was imprisoned by the Japanese. This imprisonment was a retaliation for the Russian raid on the Kurile island of Eetooroop conducted several years before by Davidoff and Chwostoff as ordered by Nicholas Petrovich Resanoff. Resanoff, the Russian emperor's chamberlain and plenipotentiary over the Russian possessions in the north-east and north-west Pacific, humiliated by Japan's ' closed-door ' policy, had avenged himself upon the small and defenceless island.

Captain Vassily Golownin was a decent sort of fellow, and Moor at first was not only subordinate but subservient to him. Later a schism developed. Moor avoided Golownin and became exceedingly sycophantic in his attitude toward the Japanese.

That the Japanese enclosed both Golownin and Moor in wicker-like baskets stimulates conjecture. The Japanese in substance consumed or devoured the two men. For months they were contained within the ' entrails ' of Japan. At long last, Moor became schizophrenic.

In his schizophrenic state he developed the delusion that he had swallowed the sun. Japan is the ' land of the rising sun! ' Moor actually developed the delusion that he had swallowed Japan, that he had swallowed the sun. Of course this delusion was not in keeping with the actual fact, the ego-alien fact, the ego-threatening fact that, devoured, he was being held prisoner by the sun of Japan. This reversal has been described by William Silverberg as a schizophrenic manœuvre.

Van Gogh also ate up the sun. That he had done so is evidenced in his paintings. In one painting, *The Sower*, the predominant reference is to the sun that makes things grow.

' In a . . . letter he wrote that he had had a strenuous week of painting *among the corn in the full sun* and had made a sketch of a sower. He also described the colour—a ploughed field of violet, a sower in blue and white and over all a yellow sky with a blazing *sun* . . .' (25, p. 158).

And then, in a companion piece called *The Reaper*, Van Gogh in his own words characterizes *The Reaper* as the devil that eats up the sun and the sun's product.

'. . . he [Van Gogh] took his easel and canvas, walked down the long road to the station, climbed the hill past the Catholic Church, and sat down in the yellow cornfield, opposite the cemetery.

' About noon, when the fiery sun was beating down upon his head, a rush of blackbirds suddenly came out of the sky. They filled the air, darkened the sun, covered Vincent in a thick blanket of night, flew into his hair, his eyes, his nose, his mouth, buried him in a black cloud of night, airless, flapping wings.

' Vincent went on working. He painted the birds above the yellow field of corn. He did not know how long he wielded his brush, but when he saw that he had finished, he wrote *Crows Above a Cornfield*[1] in one corner . . .' (29, pp. 482–3).

Van Gogh was frustrated in devouring the sun, and devoured parcels and fragments (black birds) of the night instead.

' Van Gogh resolved his dilemma by painting the sower and then eased his anxiety and sense of guilt by means of another picture which he called *The Reaper*. This canvas shows a

[1] According to ' Van Gogh Paintings and Drawings ', a Special Loan Exhibition, The Metropolitan Museum of Art, The Art Institute of Chicago, 1949–1950, the last Van Gogh painting was entitled *Crows over the Wheat Fields*.

little reaper in a yellow wheatfield under a sizzling sun. He tried for an all-over effect of "sulphur". Regarding this paper, he wrote, "I am struggling with a canvas, a 'Reaper'. The study is all yellow, terribly thickly painted, but the subject was fine and simple. For I see in this reaper a vague figure fighting like a devil in the midst of the heat to get to the end of his task. I see in this figure the image of death in the sense that humanity might be the corn he is reaping. So it is—if you like—the opposite of the 'Sower' I tried to do before. But there is something sad in this death—it goes its way in broad daylight with a sun flooding everything with a light of pure gold"' (25, p. 158). Van Gogh symbolized his eating up the sun by devouring his paints (16, p. 264). Like Feodor Moor, he too shot himself through the chest and died from his wound (16, p. 264).

It is not necessary to posit the existence of land bridges to explain the significance of the crows that attacked Van Gogh and that of the crows that attacked the devil in the Ainu land. It is indicated by some of his paintings that Van Gogh possessed a smattering of knowledge about Japan. But it is indeed unlikely that he knew anything at all about the Ainu crow-sun-devil myth. More than likely, his 'crows' were schizophrenic 'blackouts'—analogous to the splinters of night darkness that are banished by the sun.

And from another famous report from literary records, one that greatly interested Freud, the following statement is taken:

'By the way, even today the sun looks different to me than before my illness. Her rays pale before me if, turned towards her, I speak with a loud voice. I can look into the sun unperturbed and am dazzled only very little, whereas in days of health, I, like other people, would have found it impossible to look into the sun for minutes on end' (26, p. 126).

It is characteristic of many people to sneeze if they look too long at the sun. It is as if staring at the sun produced a violent ejecting sneezing. In sneezing, the sneezer closes his eyes, blotting out the sun. The closing of the eyes is part of the reflex.

The following will sound like a sweeping generalization. Nonetheless, I have clinical evidence to support my claim that some aspects of sneezing are a part of the infantile colic story (28).

Sneezing at the sun betrays in certain patients the concept of having been 'poisoned'; 'poisoned' by a maternocentric mother. Being touched by 'poisonous' warm fingers of the mother and 'poisonous' warm rays (hands) of the sun are analogous (*see illustration*). American internists refer to the latter as a clinical entity dubbed 'sun poisoning'. The maternal climate and the sun climate are indigestible. The mother and, consequently, the sun are 'ambivalent'. The mother pretends to feed wholesome milk to her child, but because of the mother's agitation, her maternocentricity, this wholesome milk turns out to be 'poison'.

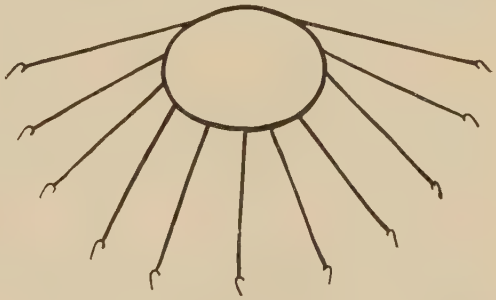
The sneeze rejects the sun, the cosmic mother. The rejection is the symbolic opisthotonus that pushes away the mother. The mother symbolized

'. . . the sun was not drawn as an ellipse, but rather like a disc with two flattened poles.

The sun hieroglyph was in use as early as 3200 B.C. when hieroglyphic writing was introduced, and a short time later the hieroglyph for horizon occurs.

But the name of King Akhenaten and of his city, Akhet-aton, were not coined until *c.* 1370 B.C., and therefore the hieroglyph of the horizon is infinitely earlier than the name of a town composed of it.

The Egyptians *always* draw the sun as a flattened disc and thus make no difference when it is just above the horizon or when it is at the zenith. When they show the rays of the sun the beams are drawn as lines emanating from all sides of the disc except the upper third of the circumference, and these rays usually end in hands seen in profile. Sometimes they hold the sign of *Life*, but when they are empty they still have the connotation of 'giving'.



(*This information received from Bernard Bothmer, Department of Egyptian Art, Museum of Fine Arts, Boston, Mass., in a personal communication.*)

by the sun is reacted against by the angry loneliness that comes to be resident in the areas involved in the totality of the picture of infantile colic. This material will be given more specific attention in a paper yet to be published entitled ' The Life Cycles of the Sun God '. According to Dr. Ann Stewart (28), eosinophile increase, spasms of the bronchioles and colon, hives, eczema, conjunctivitis, and turgescence of the mucous membranes of the nose are constituents of infantile colic, of ' excessive crying in infants '. The chest, throat and larynx are involved in the act of crying or the preparedness for crying (4).

The sneezing at the sun is a rejection of intimacy, of love with the mother, the sun, the cosmic mother. Sneezing is a forecast of the ' sun poisoning ' that occurs in the person who needs to reject further poisoning by anticipating the avoidance of love, of intimacy.

Once a patient of mine tried to stare down the sun. For his efforts, he burned a hole in his retina. His lens acted as a magnifying glass and focused the rays of the sun on his retina in such a way that a hole was burned in this membrane.

Ferenczi concerned himself with parental aspects of the sun. He believed the sun to be a father figure. In many ways the sun is often a maternal substitute. It is my opinion that when the sun is paternalistic, the paternalism cloaks an underlying maternalism. Ferenczi says: ' For a neurotic whom I analysed the soothing effect of the sunbath depended for the most part on his tremendous father-transference. For him the sun was a father symbol, which he gladly let shine upon him and warm him; it had in addition an exhibitionistic significance ' (8, p. 365).

It is not always the mouth that angrily devours the sun. Sometimes the skin is enraged by the sun's caresses, and devours the sun.

One patient, a woman from the Ozarks, came into money, married, and lived with her husband in Grosse Pointe, Michigan. Each winter she went to Florida. For the first four weeks that she basked in the sub-tropical sun, nothing happened to her skin. However, during the last two weeks of her winter vacation she could not tolerate even a short exposure to the sun. During that time when she exposed her lithe body to the sun's warmth, her skin broke out. Ugly, weeping, angry-looking lesions covered her from head to foot. After returning to Michigan and for weeks after the final exposures to the Florida sun her skin broke out into weeping raw areas interspersed with patches of giant urticaria.

During the summers she visited her husband's family home on Saranac Lake. For the first month and a half at Saranac she tolerated the sun. When it was time for her to return to Grosse Pointe, she broke out in a rash.

As with her own mother's behaviour during the precognitive period of her infancy, the sun was a mother who at first seduced her by warm caresses and then suddenly and finally abandoned her to her own resources. Her skin reacted with rage to this abandonment.

Conclusion

Under optimum conditions the rhythms and especially the precognitive rhythms of the child are respected by the mature infantocentric mother. The mother exercises and stimulates the whole of the child's skin. She does not limit her attentions to the mouth, or to the urogenital region of the body. She carries the baby on her own body, permitting it to clasp her and nurse on her and actively to feel her as well as to be felt and caressed by her. This skin attention by the mother focuses experiences derived from the other senses upon the near-at-hand mother. The smell of the mother, the mother noises, the sight of the mother, the touch of the mother are centralized as originating in this special human being that is felt by the skin.

With the physical presence of a permissive mother at the baby's skin, the maturative process is not only promoted but integrated. All precepts are afforded an equal, simultaneous stimulation and contemporaneous relatedness of the five different perceptual impresses from the mother body. Because the rhythms of the baby are respected by this intimate maternal climate, and because it remains in a more or less continuous contiguity with the mother, the baby is introduced to the world instead of the world being thrust in fragmentary fashion at the baby.

This type of precognitive relatedness with the mature mother advances or subsumes a continuity in his social experiences. The continuous presence of the mother in physical contact with the baby reduces to a minimum those devastating frustrations that incur shock responses, fragmentation of previous gains in the inchoate ego integration, and the indiscriminate paralysis of efforts at expansive reaching out for the exploration of new areas in the world of

reality. Previous to cognition the infant is one with the mother. This oneness requires an unhampered serenity and mutuality for the eventual and proper liquidation of the infantile physical and psychic togetherness. It is intended by nature that the infant should grow away from the mother. It is intended that he should attain an identity of his own that is not at its adult level slavishly addicted to or slavishly rebellious towards the mother person. This normal maturation implies a development of a sense of reality that is not hampered by parataxic orientations in the solution of any of the contemporaneous problematic situations that present themselves.

The individual reared in this optimum maternal climate feels his age for every level of development. He knows where and when he is actually independent. This is a feeling tone, a something inside himself that is a proper measure of himself and of the significant other person. In his association with others, he feels neither slavishly dependent nor slavishly independent. He feels that he is neither king nor slave, unless he actually is one.

Further, with the primary unit properly divided into self elements separate and distinct from mother elements, the ego boundaries approximate the actual body boundaries. He is able to distinguish self from what is not self, or at least the functional limits of the body and mind of the self. Because of this ability that is a function of a proper body memory physically, intellectually, and emotionally, he does not form magical identifications with other people. The separation of the primary unit is not in a constant state of flux, of rejoining and separating of the self elements and mother elements. In this normal development, things are not as important as persons—and things are actually what they are and not what fancy makes of them.

REFERENCES

(1) Ananikian, Mardiros H. 'Armenian Mythology.' In *The Mythology of All Races* (see No. 15), **7.**

(2) Batchelor, John. *The Ainu and their Folk Lore.* (London: Religious Tract Society, 1901.)

(3) Browne, Lewis. *The World's Great Scriptures.* (New York: Macmillan, 1946.)

(4) Bull, Nina. *The Attitude Theory of Emotion.* (New York: Nervous and Mental Disease Monographs No. 81, 1951.)

(5) Campbell, Joseph. *The Hero with a Thousand Faces.* (New York: Pantheon Books, 1949.)

(6) Collier, John. 'The Nature of Man.' In *Merrill-Palmer Quarterly* (Detroit), Spring, 1955.

(7) Dixon, Roland B. 'Oceanic.' In *The Mythology of All Races* (see No. 15), **9.**

(8) Ferenczi, Sandor. *Further Contributions to the Theory and Technique of Psycho-Analysis.* (London: Hogarth, 1926.)

(9) Frankfort, Henri. *Kingship and the Gods.* (Chicago: University of Chicago Press, 1948.)

(10) —— *Ancient Egyptian Religion.* (New York: Columbia Univ. Press, 1949.)

(11) Frazer, Sir J. G. *The Golden Bough,* Vol. i (*The Magic Art and the Evolution of Kings,* Vol. 1). (New York: Macmillan, 1935.)

(12) Freud, S. *An Outline of Psycho-Analysis.* (New York: Norton, 1949.)

(13) —— *Collected Papers,* Vol. 5. (London: Hogarth, 1950.)

(14) Golownin, Vassily. *Narrative of My Captivity in Japan.* (London: Schulze and Dean, 1818.)

(15) Gray, Louis Herbert, *et al.* (ed.). *The Mythology of All Races.* (Boston: Marshall Jones, 1918.)

(16) Holstijn, A. J. Westerman. 'The Psychological Development of Vincent van Gogh'. *American Imago,* **13,** No. 3, 1951.

(17) Kahler, Erich. *Man the Measure.* (New York: Pantheon, 1943.)

(18) Keith, A. Berriedale. 'Indian Mythology.' In *The Mythology of All Races* (see No. 15), Vol. 6, Part 1.

(19) Leach, Maria (ed.). *The Standard Dictionary of Folklore,* Vol. 2. (New York: Funk and Wagnalls, 1950.)

(20) Levin, A. J. 'Oedipus and Samson and the Rejected Hero-Child'. *Int. J. Psycho-anal.,* **38,** 1957.

(21) Malinowski, Bronislaw. *Magic, Science, and Religion.* (Boston: Beacon Press, 1948.)

(22) Max Muller, F., 'Egyptian Mythology.' In *The Mythology of All Races* (see No. 15), Vol. 12, Part 1.

(23) Piaget, J. *The Origins of Intelligence in Children.* (New York: Int. Univ. Press, 1952.)

(24) Róheim, Géza. 'Fire in the Dragon'. *American Imago,* **7,** No. 2, 1950.

(25) Schnier, Jacques. 'The Blazing Sun'. *American Imago,* **7,** No. 2, 1950.

(26) Schreber, D. P. *Memoirs of my Nervous Illness.* (London: Dawson, 1955.)

(27) Spitz, René A. 'Autoeroticism: Some Empirical Findings and Hypotheses on Three of its Manifestations in the First Year of Life', *Psychoanal. Study of Child,* **3/4,** 1949, pp. 85–120.

(28) Stewart, Ann. 'Excessive Crying in

Infants—A Family Disease'. *Transactions of the Sixth Conference on the Problems of Early Infancy*. (New York: Josiah Macy, Jr., Foundation, 1952.)

(29) STONE, IRVING. *Lust for Life*. (New York: Modern Library, 1939.)

(30) SWEDENBORG, EMANUEL. *Heaven and its Wonders and Hell*. (New York: Swedenborg Foundation, 1946.)

(31) SYLVESTER, EMMY. *Transactions of the First Conference on the Problems of Early Infancy*. (New York: Josiah Macy, Jr., Foundation, 1947.)

(32) WERNER, ALICE. 'African Mythology.' In *The Mythology of All Races* (see No. 15), Vol. 7, Part 2.

(Received 15 July, 1956.)

THE PSYCHO-ANALYTIC TREATMENT OF ULCERATIVE COLITIS

By

MELITTA SPERLING, M.D., New York

Introduction

The disease medically known as non-specific idiopathic ulcerative colitis hardly appears to be a classical subject for psycho-analytic investigation or treatment, and it is not surprising that psycho-analytic interest in it is relatively recent (1, 8, 5). The disease, still clinically puzzling to internists, is characterized by bloody diarrhoea and abdominal spasms, follows a chronic or acute course often with high fever, and is sometimes fatal. At first glance, this description seems to preclude considering ulcerative colitis as a psychiatric disorder. It has, however, certain features, particularly the onset and the spontaneous exacerbations and remissions, that are definitely related to certain significant life situations. This relationship attracted psychiatric attention some twenty-five years ago (4, 11, 12).

The life situations that precede the onset of ulcerative colitis seem to resemble those that precede another baffling disorder—the group of schizophrenias. There appears to be a similarity in the circumstances under which the break with reality occurs in schizophrenia and the somatic break occurs in ulcerative colitis. Many important questions are suggested by this similarity. Why does one person react with a psychotic break and another with a somatic break? Why is the somatic break specifically ulcerative colitis? What precipitating factors in the onset of schizophrenia and ulcerative colitis are of determining importance? Is there a similarity in the personality structure of patients with these two disorders, and consequently a similarity in the dynamics of their reactions to traumatic experiences? If so, other questions arise. What is the significant factor—specific experiences or constitutional and hereditary conditions?

Because projective tests of patients with ulcerative colitis almost invariably point to a latent psychosis, there is a resistance to—one might say, a fear of—utilizing psycho-analytic techniques in such cases. The tacit assumption is that it is dangerous to remove the somatic symptoms, since by so doing an underlying psychosis will be exposed. On the basis of this assumption, it would appear that a case of ulcerative colitis cannot be treated psycho-analytically without running the risk of precipitating a psychotic break. My experience does not support this conclusion. On the contrary, I have found it possible, in psycho-analytic treatment of the ulcerative colitis patient, to analyse the patient's defences without the fear or the expectation that he will be overwhelmed by the impulses against which these defences were set up. I reported in 1946 on cases of ulcerative colitis in children cured by psycho-analytic treatment, and have followed these cases up to the present time—that is, for a decade and more (8). I do not know of any cases cured by other methods. At least, none have been reported in the literature.

I am not concerned with whether or not ulcerative colitis in adults can be favourably influenced by psychotherapy; undoubtedly it can. The questions I raise here are: Is ulcerative colitis a curable disease? If so, by what means is it curable? I present the case of a young adult patient with severe ulcerative colitis as a contribution towards an answer to these questions. Psycho-analytic treatment not only effected a cure of the ulcerative colitis in this patient, but also prevented him from developing a psychotic break, which in a certain early phase of treatment appeared imminent and inevitable.

Case History

The patient, a young man of nineteen, was referred to me for psycho-analytic treatment because of an acute exacerbation of a non-specific ulcerative colitis. He had had his first attack at the age of fourteen. During the following five years, despite continual medical care (which included a rigid diet), he had had frequent attacks of increasing severity. During this period, he also had severe insomnia and feelings of discomfort with people, especially in

crowded places such as stores and subways. He felt that people were looking at him and talking about his nose, which he considered very large. He was more at ease in the company of another person than alone.

The patient's father died when he was fourteen, and shortly thereafter he developed ulcerative colitis. A marked change in his personality took place during the following year. His nose suddenly began to grow and he was markedly concerned about it. He thought of undergoing plastic surgery, but was fearful of the outcome and worried that he might not like himself afterwards.

The patient is the youngest of four children. He and his brother, Bernie, eleven years his senior, live with the mother. Another brother and the sister, both older, are married. After the father's death, Bernie played a very significant rôle in the patient's life. The brothers shared a room. Bernie was very close to the patient; he was interested in his welfare and also supported him financially. Bernie did not appear to have much interest in girls, although he went out with them occasionally. When the patient was nineteen, Bernie became seriously attached to a girl and considered marriage. The patient was shocked; he could not understand what his brother saw in this girl, for to his mind she was 'just nothing'. He suffered an acute exacerbation of the ulcerative colitis at this time and accepted referral to me.

In treatment, the earliest interpretations given to the patient dealt with his resentment against his brother whom he was losing to the girl. The exacerbation of the ulcerative colitis symptoms and his disturbed behaviour were interpreted as a reaction to the anxiety of separation from his brother. Early in the psycho-analysis the patient had, at my suggestion, abandoned the strict diet he had been observing for five years. He had gained weight, and his colitis symptoms had subsided. When the date for the brother's wedding was set, however, the patient had a recurrence of the bloody diarrhoea and became disturbed. He expressed fears that he would not be able to attend the wedding, that he would have a nervous breakdown, that he might collapse while walking down the aisle and disrupt the ceremony. It was very obvious that he could not tolerate the idea of losing the relationship he had with his brother. The analysis, at this time, dealt with his inability to separate himself from his brother.

In accordance with my concepts established in previous work, the cramps and the diarrhoea were interpreted to him as representing his magical omnipotent way of giving up his brother by devaluating him to faeces (6). What he could not achieve in reality was thus accomplished in the somatic symptoms as if he were saying that, having made his brother worthless, he could now give him up. The anal-sadistic control over a frustrating love object operates in this way in ulcerative colitis. The passive experience of losing the love object, unacceptable to the patient, is thus transformed into the somatic, active pushing out of the love object. The accompanying rage and pain are completely denied and are released in the somatic symptoms. The more intense the rage and fury, the more severe are the somatic symptoms, especially cramps and frequency of bowel movements.

As the patient's ulcerative colitis symptoms subsided and his total behaviour improved, he began to complain about girls. He felt that girls had an advantage over boys. Boys had to make overtures to girls, and had to give 'something' to them. 'Women get money from their husbands and then henpeck them', he said. He thought girls did not like him, but actually he provoked and annoyed them. He quarrelled with his future sister-in-law, and felt that his brother had no time for him because of her. Gradually his real fears relating to women came to the fore—that if he had intercourse he might get venereal disease or impregnate a girl. He told me that he had always been envious of his sister and had never got on with her because she did not have to work when she lived at home. and now had a husband to support her. His fear of losing his penis in the vagina was so intense that in speaking about it he trembled and felt goose pimples all over his body. He greatly feared the 'hole', as he called the vagina. In this phase of the analysis, the patient discussed his childhood. He felt that he had been very different as a child—happy, outgoing, and rather mischievous. He had had many friends and had liked girls until he entered high school. Then everything changed. The 'kids' in his high school were very tough and he couldn't cope with them. It was at the start of high school that he developed a severe attack of ulcerative colitis which subsequently became chronic. He remembered having had diarrhoea earlier in his life, at six or seven years of age, and that on many occasions, when he had bellyaches in school, his sister would come to take him home.

At this time in the treatment, the diarrhoea and bleeding from the rectum had stopped, but he complained of a new symptom, which worried him greatly. His penis was bleeding. He had a habit of lying on his belly and pushing his penis forcibly into the mattress, and he thought that this was how he had injured his penis. He would never touch his penis with his hands. He appeared to be more disturbed at being looked at than he had been, and his feelings that people were making remarks about the size of his nose also became more pronounced. He had dizzy spells and a feeling that he was losing his reason. He gave the impression of being on the verge of a psychotic break.

At this point, it became necessary to interpret to him immediately the self-destructive aspects of this behaviour and the unconscious motivations for it: he was trying to damage himself; it was as if he

wanted to get rid of his penis, and was afraid to touch it because of his destructive impulses. He became very anxious, repeatedly asking, ' Can I do it? Can it come off? ' but added, ' Don't tell me this, I don't want to know.' I also pointed out to him that he could not relinquish his brother to his rival, the brother's fiancée. The effect of these interpretations was immediate and remarkable—all his symptoms subsided.

The brother's wedding, which the patient attended, went off surprisingly well. After the couple left for their honeymoon, however, the patient again started to complain about dizziness and nausea, especially in the mornings on the subway, and he frequently had to change trains. (Formerly he had made the trip with his brother.) This behaviour was interpreted to him as the expression of his wish to become sick, to stay at home, and to force his mother and brother to take care of him; furthermore, he felt resentful and frustrated with the analyst whom he held responsible for his deprivation. To get sick and to lose the job also meant to stop the analysis.

Immediately after this interpretation he remembered a dream he had had the previous night. In the dream he had stopped his analysis and had gone back to the very first doctor who had treated him. He was still sick, and the doctor sent him back to me. The feeling in the dream was that I was the only one who could cure him. The background for this dream follows: after the brother left home, and stopped supporting him, the patient had taken a night job in addition to his regular one, in order to make enough money to finance his treatment. It was apparent to me that he was undertaking too much; that he was arranging a reality situation which would justify his resentment of the analyst. I accordingly offered to reduce his fee so that he could give up the night job and still have some money left for himself. He accepted my offer, but shortly afterwards he had a return of the colitis symptoms and complained that he felt very weak and dizzy at work.

This dream indicated a change in the transference relationship which, in its full significance and implications, could be understood only later in the treatment. The fact that I had reduced his fee substantially was taken by the patient as an indication of my personal interest in him. I had put myself into the rôle of the mother and brother, and he repeated with me, in the transference, the behaviour that characterized his relationship with these two important figures in his life. The patient measured his ability to control his mother and brother by the degree to which he was able to affect them with his illness.

A period of intensification of symptoms and generally disturbed behaviour followed this dream and the episode of reducing the fee. A new somatic complaint, bleeding haemorrhoids, was added to the already impressive list. During this period, he remembered a ' funny ' dream. He came to my office and I was cleaning his teeth. I found five thousand cavities for which I was treating him. In the dream, he said that he goes to the dentist twice a year and usually has three cavities For the treatment of five thousand cavities he would have to feel indebted to me for a lifetime. He wanted to go to his doctor for a rectal examination, but I didn't like his doctor, and sent him to someone I had suggested. In association to the dream, the patient said that he had planned to make an appointment with the proctologist who had previously examined him. He remembered that once a pretty young nurse had given him an enema, before a sigmoidoscopy, and that it was both embarrassing and exciting to him. He also thought of the pain caused by the doctor's rectal examination when he had haemorrhoids. The symbolism of the numbers two and three had been discussed on a previous occasion, in connexion with dream material. When I interpreted to him that the five thousand cavities which I found, in addition to expressing his feelings about the fantastic findings in analysis, might also represent a bisexual symbol—namely, two and three and three zeros—he immediately recalled a story which he had read in the newspaper the evening preceding the dream, about a man who had been transformed into a woman through an operation. This dream also expressed his feeling about the reduction of fee and the number of sessions, and his unwillingness to be indebted to me. The unconscious significance of the bleeding from the rectum as an indication of his femininity (menstruation, birth, competition with his sister-in-law, he having a child instead of her) had already been discussed with him. I pointed it out to him again in connexion with this dream.

He now looked and felt ill and his symptoms, especially the bleeding, were acutely intensified. When I interpreted to him that he was now trying to have a somatic break because he had been prevented from having a nervous breakdown which, according to him, might have stopped his brother's marriage, he replied that this was certainly a much better way. At least it was not so obvious and, after all, he was still working although he didn't know how he managed it. He actually began to plead with me not to interfere—' Maybe I really am sicker than you think. How do you know? Maybe I don't have what others have and I can't do it.' (He had come to me because he knew one patient with ulcerative colitis who had been cured by me.)

He did not come for his next session because, as I was informed by a telephone message, he had been hospitalized for severe bleeding. When I visited him at the hospital, he looked at me and said that he was sorry about what had happened. I did not have to do much interpreting. He appeared to understand very well what had happened and the reasons for it. By this time, I too realized more fully the significance of the dream of changing doctors, and was able to utilize this understanding in handling

the patient. I explained to him calmly and simply, that he had apparently lost trust in me because, according to his feelings, I had acted like his mother and brother, and not as the unshakable and always reliable analyst, as he had expected. He said that he knew I would not give him up, and that if I had, this would have meant the end for him. He realized that at the cost of illness he had got his way and forced his brother not only to assume the responsibility for the expense of the hospitalization, but also to move back into the house. The proctologist had prevailed upon the brother to do this by explaining that his removal from the house had made the patient sick.

The importance of the transference relationship in the treatment of a patient with ulcerative colitis prompts me to discuss more fully the episode described above and the technique for handling it. The patient, at the time and also later in the analysis, unmistakably indicated that the reduction of his fee had shaken his confidence in me and had made me in reality a weak mother figure. He felt that I did what other doctors had done in such a situation, namely given in to him and treated him on a realistic basis. In this way I had made myself a vulnerable figure, someone he could treat like his mother and could no longer rely on with complete trust. In the treatment of such a patient it seems to me of the utmost importance that the patient at all times conceive of the analyst as the person who expects him to control his own impulses and knows that he can do so, knows that he does not *have* to release them instantly in the somatic symptoms or in equivalent behaviour. In this situation I should have reduced the number of sessions, rather than the fee. Reducing the fee meant to the patient that I did not believe that he could be left to his own devices, and that I, like his mother and brother, feared that he would get sick. He acted according to the formula, ' If you don't think I can control myself, I'll prove you're right.' This was amply substantiated later in his analysis, when he would tell me with genuine feeling that I was part of him, that is, of his mind, and that he could not forget what I had done for him. He explained that I had withstood his sadistic onslaughts which were his way of testing my conviction that he could stop his somatic symptoms just as he could control his behaviour.

The patient left the hospital the day after I visited him, although his doctor had suggested additional blood transfusions and a longer stay. He resumed analytic treatment and his physical condition improved rather rapidly. There was also a definite change in his behaviour and in the quality of his transference feelings after the hospital incident, which could not be attributed merely to the fact that he had achieved gratification of his unconscious needs.

At this stage of the analysis, conflicting feelings about his mother were brought to the fore. She annoyed him very much, she was tactless in exposing him to others, she made demands upon him. On the other hand, she was really the only person who cared for him and paid attention to him, especially when he was sick. At such times, his mother would stay up all night with him, listen to his moaning and complaints, worry about him and indulge him. I pointed out that this was, in some respects, like the analysis, in which I also listened to his complaints; but instead of worrying and indulging him, I interpreted his behaviour, and thus I was only depriving him. Later in the analysis, he told me that he had often been well aware that he used to complain in an attempt to annoy and worry me in the same way that he did with his mother. From her he would get sympathy when he did this. He also explained to me that this was why he had to be so observant of my facial expressions when he was sitting facing me during the session, and had to be very observant of the shade or tone of my voice when he was on the couch. Sometimes he would turn around suddenly, as if to catch me unawares to see whether I reacted in the way he wanted me to, like his mother. At the same time, he was worried that I might react in this way. His mother's anxiety at such times was to him like a signal to ' get sick '; it meant that she did not expect him to be able to control himself. Each time he convinced himself that I was not disturbed by his behaviour and yet was interested in him and not indifferent, it had a marked therapeutic effect. He needed my confidence in his ability to control his destructiveness in order to regain, or rather to develop, confidence in himself.

The patient now began to complain about the crowded conditions in the house. Since his brother moved back, he had to share a room with his mother. Many things about his mother annoyed him—that he was the baby in the house, and that his mother, particularly, still regarded him as a baby. With his physical condition improved, and bereft of a rationalization for his inability to mix with people, he began to worry about girls. He expressed the feeling that he didn't know which was worse—to be sick or to worry about girls. His feelings that girls were trying to seduce him and to tease him were interpreted to him as his wish to be seduced, to be passive and to be given something by a woman, but not to give anything himself. In this context he dreamed that his mother was cleaning up the ' mess ' caused by his diarrhoea and bleeding, while he felt dizzy and weak, and threw himself into bed. The association to this dream was overhearing his brother and sister-in-law in intercourse, and a detachment in order not to be aware of it. Brother and sister-in-law in intercourse were the re-enactment of his original primal scene anxiety, and his reaction to it as a child with a loss of control, in diarrhoea.

He brought forth ideas that his mother had not wanted him as a baby, and he blamed her for his

illness. He had been an incubator baby and he had fantasied that his mother had left him in the hospital and had forgotten about him until she was notified to come for him. ' I know better now, but this is how I used to think.' Dreams about his mother in which he was running away from somebody with her revealed that he wanted to be with his mother, to be indulged by her and to receive something from her. The analyst is the somebody from whom he is running away because she interferes with this relationship. To have a girl friend meant to him to give up mother and to become a man. Complaints about his mother were ambivalently expressed as a wish to be her child, the sick patient, and a wish to separate himself from her. He was aware of his mother's desire for him to remain a ' baby '. In the three months following his hospitalization, he improved remarkably in health, rising in weight from 100 to 150 pounds; his mother complained that he was getting fat and healthy and had no concern about anyone and paid no attention to her.

As the analysis uncovered his deeply repressed rage, he expressed fears that his temper would lead him to kill somebody. He would say, ' I feel like killing the first guy.' In speaking about his resentment towards his mother because she demanded money from him, he said, ' How else can I get this anger out of me except by diarrhoea? ' ' My mind is drifting away.' He would get frightened like a child and speculated that he was better off with diarrhoea; at least he could ' get even with them right away '. The immediacy and urgency of the psychosomatic reaction is well illustrated here. It is as if the patient feels that postponement of acting out of his feelings is beyond control. He has the costly choice between getting sick or losing control, which equals ' going crazy '. The patient was given this interpretation of his wish to surrender to anything in order to avoid the conscious awareness of such urgent impulses and painful feelings.

By this time, the ulcerative colitis symptoms and the haemorrhoids had cleared up, but a new somatic symptom—headaches—appeared. The patient now had headaches on the way to the analyst, when waiting for her, and at the beginning of his sessions. He dreamed that he and the analyst discussed his difficulties. In the dream we had got to the bottom of the whole thing. He was cured and didn't have to come for regular sessions. The dream was interpreted to him as follows: he wanted to be through with the analyst who interfered with the gratification of his unconscious wishes by exposing them, and thus prevented him from fulfilling them in symptoms. The analyst's head (skill) was the part which interfered most, so that was where he was attacking her. He was killing her off symbolically in his headache. He now had severe headaches in reaction to frustrating experiences and sometimes to dreams. He had a dream in which the proctologist was an analyst; he came to the patient's office, where he got into bed with him for the treatment. This went on for months until the patient finally quit. The doctor said that he was a very sick boy and that it was foolish of him to quit. But he didn't want the doctor to come to his place because people could see him and they would think that he (the patient) was crazy. The proctologist, who had actually manipulated him anally, was a condensation of his brother, with whom my patient had been in bed, and of the analyst with whom the patient wanted to be in bed, and whom he made into a man. After the dream of the proctologist he had a dream in which a girl was brushing up against him. This was a wet dream and was followed by a dream in which he was with his sister and a ' coloured fellow ' followed her. He suggested that she ask the coloured fellow about his intentions. She cried and said that he wanted to attack her sexually. Her brother finally got rid of the coloured fellow. The patient's sexual desire had switched from his brother, Bernie, to his sister. He readily understood that he was the ' coloured fellow ' in the dream. There was one dream shortly after this one to which he had a particularly strong reaction. In this dream, two women were engaged in homosexual lovemaking. The older one was working with her mouth on the younger one, ' almost killing her '. In the dream, he called a policeman to stop them. In telling the dream he breathed very heavily and said, ' I am scared even now.' In association, he related that he had eaten peanut butter the night before the dream. He laughed about the way in which he had pronounced ' pea-nut ', and after a while added, ' I'd kill myself if I ever had such impulses.' He was preoccupied with the abnormalities of women. ' They are all abnormal sexually ', he would tell me. ' They are so aggressive.' Yet he was coming closer to an awareness of his own sexual abnormality.

Feelings of depersonalization increased at times now that immediate somatic acting out of his unconscious fantasies was curtailed, and he would say, ' I don't care, I feel like I am in another world.' After the interpretation of the headache as a reaction to intense unconscious frustration and as representative of instantaneous killing of the frustrating object, the headaches disappeared (7). In the course of the analysis, the struggle for immediate fulfilment and its somatic acting out had changed in method and locale from the bowel to the head, the head being a more appropriate place for it after all.[1] Again when he overheard his brother and sister-in-law in intercourse, he felt nothing at first and then got

[1] The occurrence of headaches as an alternative symptom, together with a change in feeling and overt behaviour in ulcerative colitis patients, has been confirmed recently by George G. Engel. Cf.: ' Studies of Ulcerative Colitis: III.—The Nature of the Psychologic Processes ', *American Journal of Medicine*, pp. 231–256, August 1955.

extremely frightened. In the ulcerative colitis he had acted out his rage instantaneously without awareness. Now, however, he perceived the fear of experiencing the full impact of his feelings, lest he be overwhelmed by them and do something irrevocably destructive.

The precipitating factors leading to the ulcerative colitis after his father's death were reconstructed and understood by the patient in the analysis. He had linked the onset of the ulcerative colitis to a party which he had attended when he was about fourteen years old, and at which he thought that he drank too much. This party was after his father's death, when his balance was already precarious and his course was set in the direction of feminine identification and unconscious passive sexual surrender to the mother and brother. Mother and father had always quarrelled, and the mother had used the patient as a solace in an unhappy marriage. She had been overaffectionate with the boy, hugging and kissing him and calling him sweet names. He had always sided with mother against father. When the father suddenly died, the patient's unconscious guilt feeling precluded identification with the father because this would have meant putting himself in his place, and possessing mother as a man. Since he could not be a man, he had to remain a child or be a woman. In his brother, Bernie, the patient revived his father. ' He is a father to me ', he would tell me. However, he did not rebel against the brother, but submitted passively. He was by nature a rebellious and aggressive, highly strung boy, and it was at the time of his father's death and his submissive relationship to the brother that the change in his personality took place. It was also then that he developed the ulcerative colitis. At the party, he had to drink so that he would not be aware that he did not act like the other boys, and that he was competing with a girl for the attention of his friend, for whom he then had a strong unconscious homosexual attachment.

The patient expressed belated understanding for this period in his life, recalling his feelings when he was teased and baited by the boys in high school. He knew that he was not a coward, and yet he behaved like one. He recalled the rage which he felt and yet he let himself be treated like a girl. ' If I could only do over that period of my life, I'd show them ', he said. ' I want their blood. I could kill them.' In the symptom of bleeding his blood had flowed, while it actually was meant to be the blood of the attackers. On a deeper level, however, he had accepted the female rôle and wanted to be treated as a girl. This too was expressed in the bleeding.

At this point in the analysis he confessed that he had occasionally engaged in the practice of cutting hairs around his anus with a razor blade. This had caused profuse bleeding from the haemorrhoids and had necessitated the hospitalization discussed earlier in the paper. The interpretation that I had given in the hospital, that he wished to commit suicide, was even clearer now. I had also interpreted to him at an earlier phase of treatment that through the haemorrhoids he had expressed his pregnancy and childbirth fantasies with the swelling, pain, and bleeding. Following this interpretation, he had had a dream in which he was in the hospital and a nurse was squeezing his haemorrhoids. He would have preferred that to what I was doing, namely squeezing his mind with analytic interpretations. The proctologist had advised haemorrhoidectomy. To the patient, this had symbolized Caesarean section. The bleeding from the penis, also self-inflicted, had symbolized castration. Now the haemorrhoids had disappeared, as had the pain and swelling, without an operation. He had no ulcerative colitis symptoms, no cramps, no diarrhoea. He had put on weight and felt stronger and better than he ever had in his life. And he still had his penis intact.

At this time in the treatment, he began to talk again about the nose operation. Actually, the wish for rhinoplasty was a recurrent theme in the analysis. I pointed out to him that he wanted an operation, and that it could be performed on the anus or the nose, but that it was really a displacement from the penis to the nose. He said that the only thing that prevented him from going ahead with surgery was the fear that he might not like the new nose. The wish for this operation was really the hope that a transformation into a girl could, in some way, be effected without the loss of the penis. He had a dream in which he was in my office and he experienced pain in his penis. He asked me to pull out a hair which was causing the pain. In the dream, I was preparing surgical instruments and he was afraid that I wanted to cut off his penis. The feeling in this dream was that this was his last session with me and that he would be cured; it fulfilled his expectation that the psycho-analysis would transform him into a girl, and that I would perform this operation on him. In connexion with the patient's wish to be a girl, now becoming apparent to him, he had a series of dreams in which he was buying girls' dresses. In one dream he tried on a beautiful evening gown. He had never acted out in reality his transvestist tendencies. He had always envied his sister. When she had a rhinoplasty he had decided that he would have one too. Shortly before he came to me for treatment he had made arrangements for the operation, but he had then become acutely disturbed and had had a severe exacerbation of the ulcerative colitis.

The patient was under psycho-analytic treatment with me for two years. The analysis was discontinued by mutual agreement, with the understanding that I would see him whenever he needed me. He had postponed the rhinoplasty until the end of the analysis, but now wished to undergo it. We had discussed his motives for rhinoplastic surgery carefully and I felt that I should not object to it, since he wanted my approval. Actually, although his nose

was large it was not, to my way of thinking, a disfigurement. He presented himself to me after the operation, and he looked well and seemed pleased and happy.

Treatment ended two years ago, and the patient has now been completely free of the ulcerative colitis symptoms for three and a half years. It will be recalled that he had constantly had these symptoms, with frequent and severe exacerbations, during the five years prior to entering psycho-analytic treatment. However, freedom from the symptoms of ulcerative colitis is not and should not be considered a proof of cure, even if it extends over a period of ten or twelve years, as has happened in some of the cases I have treated. I consider the change in the total personality of the patient and in his mode of living a more reliable indicator of the results of treatment. The patient, in the course of the analysis, in situations to which he had previously reacted with an exacerbation of the ulcerative colitis, no longer produced these symptoms; instead, he developed new ones—headaches. This process was an indication that the unconscious fantasies underlying the syndrome of ulcerative colitis had been made conscious and had been devaluated by the analysis. The ulcerative colitis symptoms proper (abdominal spasms and bloody diarrhoea) had permanently cleared up in the first half-year of the analysis. Towards the end of the first year the patient had started to date girls and had sexual relations with several girls. In his first attempt at intercourse, with a girl who was very kind and helpful to him, he reacted with panic at the sight of the vagina. He lost his erection, and when he regained it because he knew she wanted to have intercourse, he hid his penis from her. ' She was so pretty with her clothes on ', he said to me.

There has been a basic change in the patient's relationship with his mother. He does not want her to caress him and call him pet names any more. He has even assumed some responsibility for her, and he considers this a very significant development. His brother, Bernie, now lives in a different state. After Bernie moved, the patient lived for a while with his married sister and his mother, but after a short time he decided to live with friends in his old neighbourhood. At the close of the analysis he felt that he was now ready for military service from which he had been twice deferred while undergoing treatment. He was found to be in good health and was inducted into the Army. At the re-examination, which included X-rays after barium enema and sigmoidoscopy, the final comment upon his condition was, ' This is not the same fellow we examined two years ago.'

Comments on the Dynamics of the Case and of the Treatment

The use of the psycho-analytic technique, as demonstrated in the treatment of this patient with ulcerative colitis, was predicated upon my conviction: (i) That the patient can and should be made aware of the impulses which are released gradually from the unconscious in the process of devaluating the somatic symptoms; and (ii) that, through the support of and relationship with the analyst, the patient can learn to tolerate and to cope with these impulses consciously and can give up the psychosomatic symptoms without developing psychotic reactions. Only a psychoanalyst who has gone through such an experience with an ulcerative colitis patient, and has convinced himself that the patient can relinquish his somatic symptoms when he has a real motive to do so, will be able to analyse and to effect a cure of such a patient. It seems to me that any other form of psychotherapy not only does not cure such a patient but actually militates against recovery. This is so because non-interpretative psychotherapy only reinforces the patient's feeling that his illness is beyond his understanding and control and that he can become a victim of it at any moment. The psychotherapist who fears to arouse the repressed impulses from the unconscious is faced with the dilemma of not adequately treating and not curing the patient in order to avoid the risk of releasing the psychotic elements inherent in the illness.

It follows from the views expressed above that the anaclitic type of psychotherapy (3) is inadvisable because it encourages the regressive tendencies of the patient and makes him inaccessible to psycho-analytic treatment later, in the sense that it has been described in the case material presented here. Anaclitic practices, such as the therapist preparing and administering meals to the patient, being available to the patient at all times, and relaxing controls with no limits set and with a minimum taxing of the patient, represent a repetition in the therapy of the grave mistakes made in the earlier life of the patient. Again, the patient is accepted and rewarded when sick and rejected when well, this time by the doctor, just as he had been by his environment, especially the mother.

Some analysts believe that it is advisable to postpone psycho-analytic interpretations until the patient loses his somatic symptoms. This view, in effect, says: ' When you are sick I'll be good to you and spare you, and when you are better I'll give you interpretation and painful reality, where you will discover the truth about yourself.' In this type of treatment, the patient, who is already fighting a losing battle against his infantile strivings, is only encouraged to regress.

Where is the motive for reality and health in this indulgent and narcissistically gratifying type of treatment? The reward is tremendous when the therapist, like the mother, gratifies the 'sick' wishes of the patient. There can be no growth in this type of psychotherapy, only a shift in dependence from mother to therapist. This was precisely what happened with my patient when I reduced his fee. This gesture, instead of reassuring him, provoked intense anxiety and resentment, because it meant to him that I wanted his lifelong dependence upon me and his compliance with my wishes, as did his mother and brother. The acute aggravation of his condition and the veiled suicidal attempt (bleeding from the cut haemorrhoid) was his rebellion against the analyst.

Psycho-analysis does not reward the dependence of the patient in the way that the mother or mother-substitute did originally, and as the therapist does in the anaclitic form of psychotherapy. Psycho-analysis, rather, helps the patient to form a new object-relationship with his analyst, and the analyst's support enables the patient to tolerate his pregenital impulses consciously without being overwhelmed by them (as in a psychotic break), and thus restores to the patient the energies for later sublimation (10). The choice does not have to be between 'sick' and 'crazy'. It is possible to prevent a psychotic break in the treatment of a patient with ulcerative colitis by a genuine separation of the patient from the object to which he has been tied in his illness. For the analyst to assume the rôle of an omnipotent parent is very dangerous, because it means to play in with the patient's need for omnipotence, and his need for projecting the responsibility for his behaviour upon the analyst.

It is my belief that psycho-analytic treatment prevented a psychotic break in my patient at the time of his brother's marriage. When the love object, the brother, had abandoned him, the patient felt that he was losing his motivation for playing along as the sick person. In the ulcerative colitis, the patient could gratify his passive and feminine wishes. He could play the rôle of the girl for his brother and that of the little child for his mother. At the same time, he could release his aggressive and destructive impulses instantly in the spasms and diarrhoea. At the time of his father's death, the patient was suddenly forced to restrain his ill temper against his brother in order to assure himself of his brother's love. He actually had to give up his personality in order to create this relationship with his brother. When it was no longer worth while to repress the aggression, since he had lost the love object (when the brother got married), the patient alternated between devaluation and elimination of his brother in an exacerbation of the somatic symptoms, and giving way to his disappointment by relinquishing reality. This is a critical phase in the life of such a patient when, through the loss of the love object, the psychosomatic object-relationship which served to maintain the psychic equilibrium is suddenly altered.

In the ulcerative colitis and the haemorrhoids he had acted out somatically his wish to be a girl and to engage in her functions—swelling, bleeding, and expelling. Strong castration wishes were acted out in injury to the penis and displaced on to the nose. He was somatically acting out his anal birth fantasies by excreting faeces and blood through the anus. Diarrhoea and bleeding were also the ways in which he was separating himself from his mother (the original love object) as if he were squeezing her out, instead of her squeezing him out, as she did when he was born. Thus he was reversing and undoing the trauma of birth. Such wishes and fantasies had to be denied, since their breakthrough into consciousness could have led to frank psychotic behaviour.

The patient's fear of loss of control and of being overwhelmed by his perverse impulses, engendered his feelings of depersonalization. In the psychosomatic object-relationship, the ambivalently loved object was over-evaluated and became indispensable to the patient in reality, while devaluation and separation took place in the somatic symptoms. On several occasions in this patient's life, when he felt abandoned and was ready to give way to his rage and disregard for the disappointing love object, the psychosomatic object-relationship came very close to changing into a psychotic object-relationship (9). It was particularly in this area that immediate psycho-analytic intervention proved most successful and prevented the patient from having a psychotic break. The outcome refutes the still prevalent idea that psycho-analysis is inadvisable in such a case.

BIBLIOGRAPHY

(1) Daniels, G. E. (1940). 'Treatment of Depression.' *Psychosom. Med.*, **2**, 276.

(2) Engel, George E. 'Studies of Ulcerative Colitis Associated with Hysterical

Colitis: III, The Nature of the Psychologic Processes.' *Amer. J. Med.*, August 1955, 231–256.

(3) MARGOLIN, S. G. (1952). 'Symposium on Psychotherapy in Medical and Surgical Hospitals,' American Psychoanalytic Association (1951); (abstract) *Bull. of Amer. Psychoanal. Assoc.*, **8,** 170.

(4) MURRAY, C. D. (1930). 'Psychogenic Factors in the Etiology of Ulcerative and Bloody Diarrhea.' *Am. J. med. Sci.*, **180,** 289.

(5) MUSHATT, C. 'Psychological Aspects of Non-specific Ulcerative Colitis,' *Recent Developments in Psychosomatic Medicine.* (London: Pitman; 1954, Ch. 19, p. 345.)

(6) SPERLING, M. (1948). 'Diarrhoea: A Specific Somatic Equivalent of an Unconscious Emotional Conflict.' *Psychosom. Med.*, **10,** No. 6.

(7) —— (1952). 'A Psychoanalytic Study of Migraine and Psychogenic Headache.' *Psychoanal. Rev.*, **39.**

(8) —— (1946). 'Psychoanalytic Study of Ulcerative Colitis in Children.' *Psychoanal. Quart.*, **15,** 302.

(9) —— (1955). 'Psychosis and Psychosomatic Illness.' *Int. J. Psycho-anal.*, **36.**

(10) —— 'Psychotherapeutic Techniques in Psychosomatic Medicine.' *Specialized Techniques in Psychotherapy.* (New York: Basic Books, 1952, 279.)

(11) SULLIVAN, A. J., and CHANDLER, C. A. (1931–32). 'Ulcerative Colitis of Psychogenic Origin.' *Yale J. Biolog. Med.*, **4,** 799.

(12) WITTKOWER, E. (1938). 'Ulcerative Colitis, Personality Studies.' *Brit. med. J.*, **2,** 1356.

(Received 16 April, 1956.)

TWO TYPES OF PREOEDIPAL CHARACTER DISORDERS

By

ISIDOR SILBERMANN, M.D., New York

Two groups of preoedipal character distortions are to be considered here: (*a*) those with autistic tendencies; and (*b*) those with symbiotic tendencies. Using the ego as our point of departure, these two groups of preoedipal character disturbances are contrasted with Kanner's autistic infantile and Mahler's symbiotic infantile psychoses.

All the disorders referred to have their source in the ego nucleus. Nevertheless, its involvement in these infantile psychoses is quite different from that in the preoedipal character disorders.

It may be assumed that the ego nucleus has its origin in the innate aversion to stimuli, that is in the stimulus-barrier. Since stimuli cannot be reacted to in the absence of perception, and since we must therefore assume that the stimulus-barrier is dependent on perception, we must postulate, *a priori*, the existence of a primordial perceptive system. Further, we must postulate in the ego-nucleus the retention of primordial reactions to stimuli, in the form of residual memory traces.

Without such postulations, the development and growth of the ego nucleus become vague concepts that cannot be manipulated for constructive purposes. They are, however, definitive realities, as real as the ego nucleus itself, whose many functions were systematized at some early period of human development and then transmitted from generation to generation as the matrix of the ego, or, according to Hartmann, as the autonomous part of the ego.

The ego nucleus includes many autonomous factors which encompass the faculty of perception, the aversion to stimuli, the primordial memory, and the functions of primitive differentiation and synthesis, and of self-preservation, as well as the inhibitory functions. It also comprises the basic function of transforming, taming, and binding the drive energies. Freud's concept of delibidinization has reference to these processes. Hartmann, Kris, and Loewenstein speak of the neutralization of the drives.

Freud was the first to conceive of the ego nucleus as historically determined, embracing, in the form of autonomous factors, the experiences and reactions of our progenitors, the subsequent trends of development, and the primal congenital ego variations.

The development of the ego proper depends on (i) the innate autonomous factors, (ii) the instinctual drives, and (iii) reality. The energy for the activation and continuous functioning of all these factors is derived from the instinctual drives, which for this purpose must be transformed, bound, and tamed, or neutralized.

If the activation and growth of these autonomous factors depend on the neutralization of the drives, then we must assume that neutralization, which is the process of transformation, taming, and binding the drive energies, is one of the earliest tasks of the ego nucleus. Thus if a disturbance of its anlage appears, the process of neutralization will be found wanting and in consequence will cause a defect in the developing ego nucleus, and *ipso facto* in the ego itself.

To neutralize, then, means to render innocuous the undesirable and potentially toxic properties of a substance. In the case of the ego nucleus it means to deprive the drives of their id attributes. The transformed and tamed drives, however, do not become undifferentiated. They do not reappear as identical neutral energies. Rather, they retain specific propensities. In the ego, for instance, we find tamed and sublimated libido as the organizing force, the synthesizing power in various forms, the energy responsible for the secondary process, particularly at that point where conflicting elements must be reconciled (Nunberg).

To formulate this concept in another way, tamed and transformed—neutralized—aggression appears in the ego in the guise of differentiation, abstraction, censorship, inhibitory function, and defences.

The primitive ego nucleus with its many diversified functions affords much room for disturbances of various kinds. There are innumerable permutations and combinations which

may result from improper functioning, faulty distribution of energy, inadequate or inefficient neutralization of the drives, inadequate synthesis, and defects in the anlage of the motor and sensory apparatus. Developmental disturbances of the drives might also tend to bring about difficulties in the necessary process of transforming, taming, and binding the id drives. These inadequacies in the structure may, according to Anna Freud, explain many childhood illnesses which cannot be predicated solely on the assumption of failure in object relationships due to a rejecting mother figure.

A properly developing ego nucleus guarantees, so to speak, proper neutralization and the development of a healthy ego; a defective ego nucleus produces the reverse. It causes an invasion of the ego by an excessive amount of untamed and untransformed id drives, resulting in a distortion of the personality, with consequent faulty adjustment and adaptation, failure of discrimination, inadequate conceptual development, and so on. It is a vicious circle, for the defective ego nucleus creates a defective ego, and a defective ego must fail in its destined aim to bring the autonomous functions of the nucleus under its control. This failure, in turn, must retard the growth of the ego.

The *sine qua non* for the very life of the foetus is its parasite-host relationship, its intrauterine symbiotic and anaclitic clinging to the mother (H. Deutsch). After birth, which forcibly interrupts this unity, the early infantile phase is characterized by vague and primitive perceptions, wild and seemingly aimless and futile motions, and crude, indiscriminate defensive reflex actions in the form of violent eruptions which could easily cause an overflow of discharge reactions and affect motor storms. If not relieved, they may lead to organismic distress, semi-stupor, or even death (cf. Greenacre, Mahler, and Ribble).

The newborn infant needs complementation for survival, which is achieved by the psychobiological rapport between the nursing mother and the child or, we might say, by a continuation of symbiosis (Mahler). The power of the enormous symbiotic wave which arises at birth does not lose its strength immediately after birth, but continues its impact far beyond childhood, an impact which at times may become overwhelming. It is a reasonable assumption that the infant could not survive the trauma of birth if the intrauterine real symbiosis were not replaced by an extrauterine social symbiosis.

It is difficult for any individual to overcome his symbiotic tendencies. Great effort at maturation is required for the child ultimately to become independent in all directions. Without external stimuli, he would prefer not to extend his horizons, not to withdraw from the protective maternal fold. The conscious perceptual system, according to Freud, must be progressively cathected in order that the self may be developed and supported step by step.

The child must span the tremendous gap between himself and the outer world, for which purpose he uses his mother as a kind of extended arm. Out of his symbiotic unity with her, he slowly proceeds from the limited mouth- and body-ego to the almost unlimited establishment of his developing and maturing ego (W. Hoffer).

This transition is often slowed down by the reactions and attitudes of some mothers who feel that the baby's body belongs to them (Anna Freud and Dorothy Burlingham). In such instances the recognition of a non-ego is delayed, the child remains imprisoned in a delimited sphere, continuing in an undifferentiated state for a prolonged period of time, and presenting a low stimulus tolerance. Should he, however, successfully avoid these pitfalls, his ego will gradually develop into a system for dealing with various stimuli through new techniques of testing and adaptation. This development is brought about by energies made increasingly available to meet ever-changing demands for unimpeded functioning.

During the period of secession from the mother-child unity, children are extremely vulnerable, particularly those with serious pathology of their somatopsychic symbiosis (A. Freud, Greenacre, Hoffer, Mahler, B. Rank, and Spitz).

Since we know that a prolonged infantile symbiosis also plays a considerable role in primitive groups (Mary O'Neal Hawkins' observations of the Navajo), it may be conjectured that symbiosis is most powerful when man and society are young, but gradually loses potency as each grows older.

Assuming that symbiosis is an expression of the Eros, we may infer that its unifying force operates in the foreground at the beginning of life, but as the years advance slowly fades into the background.

The mother-child bond may be pathological for various reasons, such as inherent structural defects of the ego nucleus, delayed maturation,

environmental damage, pathology of the mother, or the like.

If pathology is the result of only a minor deviation in the nuclear function, indicated by too prolonged clinging to, or too abrupt severance from the mother, environmental influences may partially compensate for this and lead to at least some measure of normal development (Anna Freud, Hartmann, and Kris). On the other hand, a minor deficiency may be severely aggravated by inadequate maternal care or a pathological mother.

A major ego nucleus defect, however, predisposes a child to remain disturbed—either estranged in his relationships, or over-persistent in his symbiotic cravings—a point well illustrated by Kanner's Autistic Infantile and Mahler's Symbiotic Infantile Psychoses.

The Kanner child has no affective awareness. He never seems to have perceived the mother emotionally as the representative of the outside world, nor does he respond to other objects in the world around him. He is withdrawn and remains severed and alone. B. Rank and MacNaughton describe him as having a feather-weight quality, lacking body contours and body substance. He does not seem able to overcome the separation from the mother, and the trauma of severance initiated by the birth seems to persist. His instinctual drives are apparently unchanged, only slightly transformed and tamed. Thus they cannot be utilized for the proper functioning of the ego nucleus, or in consequence for the development of the ego.

The Mahler child shows a marked mother-infant relationship, but does not advance to the stage of object libidinal cathexis of the mother. In Hoffer's words, the child is unable to replace ' the milieu interne by the psychological object'. L. Bender speaks of these children as melting in one's arms. They are mostly ' cry-babies', oversensitive infants, whose brittle egos are easily cracked by separation anxiety.

The autistic psychotic child remains a stranger to his mother. But the symbiotic psychotic child continues as a parasite. Since his ego nucleus seems less severely damaged, the trauma of birth is more successfully coped with, and his drives, particularly the aggressive drives, are somewhat more favourably manipulated. However, the functions of neutralization, differentiation, and synthesis show obvious defects, and thus serious ego distortions are foreshadowed.

These defects and distortions are likely to bring about disturbances in the proper fusion of the aggressive and libidinal drives. We encounter in such individuals certain confusions as to love and hate, sexuality, identity, the perceptive and reasoning processes, and the cathexis of the self and of objects (Edith Jacobson).

It seems clear, from this point of view, that the bisexual conflict is not the immediate cause of the psychotic breakdown (as Mahler assumed), but is one of the consequences of a structural defect of the ego nucleus. Another consequence of this defect is the ambivalence which is so outstanding a feature of these patients.

It is appropriate now to describe two types of patients who present severe and sometimes frustrating problems in our psycho-analytic work. The analyst not infrequently encounters patients whose progress, after some degree of forward movement, reaches a plateau and remains inert over long periods. Such patients are not necessarily psychotic, but show odd features which may tempt one to make inaccurate diagnoses, such as borderline case, dormant simple schizophrenia, even pseudo-schizophrenic neurosis, unclear mixed neurosis, psychopathy, and so on.

These patients may manifest acute anxiety, phobias, obsessive-compulsive symptoms and character traits, and bisexual confusion which vaguely suggests what Greenacre has termed ' bodily hallucinations of a bisexual nature', and depressions, passivity, and marked ambivalence. They either crave attachments which they cannot quite manage to achieve or sustain, because their attempts are half-hearted and unrealistic, or they antagonize the very people they wish to attract. They are cognizant of the fragile nature of their relationships, and they are frequently aware of the ambivalence of their attitudes, which are in part full of longing, in part hostile. They are also aware of their sexual disturbances, which may appear as tendencies toward perversions, homosexual inclinations, ill-conceived identifications, sadistic and masochistic desires, impotence, and so on.

There is an impression of vagueness, as if a thick layer of insulation surrounds them. Somehow they appear unfinished, infantile, and emotionally immature. While frequently successful in their occupations, and at times even outstanding, they betray the presence of effective barriers in their thinking, in their ability to advance from the concrete to the abstract, from the personal to the general.

Nothing seems to have validity unless they can

relate it directly to themselves. They resemble spiders who are unable to move freely except within the confines of the webs they themselves have spun. There are no hallucinations, delusions, ataxic, chaotic thinking, or disruptive functions. Sublimations seem more pseudo than real, and are similar to the character traits—not autonomous in the sense of Hartmann's secondary autonomy, but clearly defensive in nature. The ego shows clearly delineated defensive measures solidly cast in cemented character traits.

A deficiency of synthesis as well as of differentiation is visible. In consequence, we are confronted with inadequate integration into the gestalt. This inadequacy manifests itself also in the failure to incorporate the various ego parts into a functional unit (Hartmann), or to phrase it differently, into the ' gestalt of the ego'. It is considered normal to be possessed of one personality instead of many. The reasoning, the defensive, the social, and the organizing ego are not intended to lead independent lives, but must be synthesized into a workable whole. These patients seem somehow to be composed of isolated parts, reminding one of an orchestra whose individual instruments, though played beautifully, are not integrated into one harmonious whole.

People like these apparently were born with an ill-equipped, undeveloped, inadequately prepared ego nucleus, which makes them unduly sensitive to environmental influences. They face life as though they were in a state of semi-liquidity and have no choice after birth but to flow into the maternal mould. Since their disturbance is not too stormy, it can be compensated, and they may be piloted into calmer channels if they are fortunate enough to be the children of parents who are able to handle them wisely, and with whom they can identify successfully. If, however, their lives are encircled by clinging, possessive, infantile-symbiotic or indifferent, sadistic, infantile, self-centred mothers, this deficiency is likely to be augmented.

These patients may be divided into the two major classes of preoedipal character disorders being dealt with here. The two groups, though possessing many features in common, are actually unlike. Because they bear resemblance to the two infantile psychotic types, I have labelled them: (*a*) preoedipal character disorders with autistic tendencies, and (*b*) preoedipal character disorders with symbiotic tendencies.

A patient from each group is described in the following section, viewed from the vantage point of the ego. Both cases were severely traumatized in early childhood. However, one responded by withdrawal and limited interest in his environment, the other by too intensive and prolonged dependency. Both patients showed much faulty object-cathexis.

I. The first type, the character disorder with autistic tendencies, is exemplified by a brilliant young student who came to analysis because of depression, inability to concentrate, and failure to achieve or sustain any genuine attachment for people or objects.

Investigation disclosed an abundance of obsessive-compulsive symptoms and character traits, sadistic and masochistic as well as oral and anal fantasies, hypochondriacal fears, mild phobias, and homosexual and feminine cravings. His masturbatory fantasies centred around beatings and enemas, with painful and pleasurable extension of his body. He felt that his penis was rudimentary and he himself passive and feminine. To others, however, he wished to appear tough and vulgar.

Regarding his relationships with people, ever since childhood he had lived a quasi-tangential existence, precariously on the verge of social contact with people. He felt himself to be a lonely person, with only shallow ties. From time to time he would make timid excursions into the outer world, but, alas, these half-adventures inevitably ended in failure. At such times he appeared eager yet cynical, arrogant and aggressive. He had erected an impenetrable wall of isolation about himself. While he did not feel persecuted, considering no one hostile to him except himself, he fantasied that he was unwanted by the more fortunate ones.

The patient was still an infant when his father became seriously ill and died. The mother occupied herself exclusively with the business of providing for her distressed family, and surrendered her infant son completely to the care of his grandmother. At first the child rebelled, his rebellion taking the form of restlessness and crying. Soon, however, he changed into a passive, remote, and seemingly undemanding baby.

The grandmother forced food, toilet training, and enemas upon him. She handled him roughly and did not permit him to play with other children. She surrounded herself as well as him with a thick layer of insulation designed to render futile any attempt he might make to become part of the world. His mother was home only at night while he was asleep, and the atmosphere was like that of an underground dwelling—devoid of sunshine, warmth, or gaiety. He soon feared people, he feared the human touch lest harm come to him, he feared sleep because dreaded nightmares came to haunt him.

In school he was always a good student, well-behaved but shy and fearful, a passive rebel and an effeminate boy. Yet from time to time he would unexpectedly lunge out of his shell to strike another child. He felt neither personal hatred nor enmity, but was driven by a retaliatory passion against the world at large, as he himself expressed it. This impersonal hostility remained with him until maturity. In college he selected non-competitive pursuits, put reason to work, and kept his feelings under lock and key. Given to mechanical thinking unimpeded by any personal emotional involvements, he was able to maintain this tightrope equipoise as long as his attitude was not challenged.

At an early age anal fantasies of enemas and beatings erupted. He imagined himself overpowered by his mother who, with endless ingenuity, forced variously sized enemas into him. In turn, he fancied himself employing the same devices on other children, outdoing his mother in violence and his grandmother in aggression.

His dearest wish was to be left alone, for in his mind seclusion represented security. His own words portray his symbiotic longing, as he tries to describe the reasons for his withdrawal from life: ' I want to live in darkness and seclusion. Then no light will hurt me, no harm will come to me. I belonged from birth to the untouchables. I was isolated and neglected, and treated with viciousness; and I'm destined to bear the curse of my life, to be a stranger to the rest of the world. There is just one thing for me to do. I can only wither away since I am cut off from the real and the giving."

The patient was a sad-looking person, shy and fearful, who glanced at others only through the corners of his eyes. None the less, he was keen minded and argumentative. As a child he watched children at play, but always on the fringe, never as a participant. As a grown-up, too, he remained on the periphery, viewing people with the eyes of a forlorn child peering through a Christmas window. When invited to join in, he would run away, trembling with fear. Although he longed to change, he seemed unable to shake off his inhibiting fetters. In other words, he could not visualize himself as accepting, acceptable, or accepted.

He envied people and begrudged them their good fortune. He persisted in his uninterrupted pattern of severance, and although he had proved himself a brilliant student, he began to neglect his studies and was ultimately dismissed from college. At work he was so uncooperative and obstructive that he was discharged, and in his analysis he was endlessly provocative, as though he aimed at being punished and rejected. Although he was obviously well educated and artistic, the impression he left with people was that of an ineffectual, unsubstantial, vague kind of personality, unpleasantly aloof.

He was apparently unable to advance to an adequate level of integration. For instance, when he thought of a woman, her breasts and buttocks would be sharply defined, while other parts of her body remained blurred. Also, he never entered into any undertaking as a whole, but only piecemeal, attacking each step as he came to it. It was impossible for him to plan or even visualize the whole procedure from the outset. This weakness, however, was easily concealed from others, since his work performance in its end result was generally satisfactory.

During the course of his analysis he often felt compelled to make remarks which he himself recognized as being silly and unrealistic, to the effect that he was surrounded by enemies, or that he was unable to trust his mother, or his analyst. Although he said he knew he was being irrational, he still found it necessary and proper to guard himself against unpleasant surprises by freeing himself of any and all emotional involvements. Aimless existence was his chosen destiny. He said he was aware that he ought to change from his ' old self '. Yet he wanted somehow to remain unaltered, to retain the familiar intonation of his voice, the processes and content of his thinking, etc. In relation to the rest of the world, he preferred to remain the outsider whose ideas roamed freely in the sphere of the simple, the limited, and the not too definite. He preferred to remain antagonistic to the world, to his family, to the analyst's knowledge, as well as to the analyst's attempts ' to stuff things down my throat '.

Interpretations, he said, made him sick. They provoked trembling and suspiciousness. At the same time, he expressed great delight with his analysis to which, he assured me, he was eager to contribute as much as he possibly could. There was constant vacillation between the wish to be a full participant and the urge to hold himself aloof. Whenever he became cognizant of the desire to advance, he would at once retreat.

Immaturity and infantile attitudes enchanted him, and he found no real enjoyment in making progress. He preferred masturbation to intercourse, boasting, ' It's so easy and pleasant to masturbate to the tune of enemas '.

For quite a while his analysis represented to him the state of being gorged with huge amounts of enema fluid which made him feel replete and satisfied, yet fearful and imperilled at the same time.

Similarly, the patient's profuse reading and study merely served to help him accumulate more and more knowledge which remained, as it were, in the ' rectum of his brain '. This unrelated and useless mass of knowledge was not synthesized or integrated, but lodged, compartmentalized, in the back room of his mind. His studies were a mixture of pleasure and pain, like his enemas, and like his analysis.

He was in a constant state of bewilderment,

utterly unable to determine whether what his mother, or his teachers, or his analyst, or anyone offered him was to be considered good or bad. Hence he craved and he feared simultaneously. The maternal breast was visualized with confusion and despair, never appreciated as something gently and affectionately inserted in his mouth, but rather as something like an enema thrust violently into his anus. There was total confusion about these two portals of entry. Thus good food, a symbol of love, became obnoxious and poisonous.

For short periods he would feel that the analyst resembled a giving and propitious mother whose words were soothing and enriching. Before long, however, he would convert the analyst's words into suspicious, hostile statements. Gentleness merged into attack. He felt that instead of comforting sweet milk, freezing anal food was being given him. He recalled how his grandmother forced food down his throat ruthlessly, stuffing him as if she were a witch intent on ultimately devouring him.

In dreams he repeatedly saw the figure of a child compelled to submit to an enema. The tube broke and the damaged portion was pressed into his mouth, stopping his breath. In many dreams he saw himself in great danger. Once he dreamed he was swimming in a pool surrounded by sea lions which suddenly attacked and destroyed each other. In this dream he himself was a kind of sea animal who, though he remained unharmed, could not extricate himself from the bloody water and the filthy mess.

Not only was he a vivid night dreamer, but he also had prolific daydreams. These centred mostly around his preoedipal wishes and his oral and anal sadistic desires and frustrations. His defences were rigid and limited, and they were firmly embedded in obsessive-compulsive oral and anal character traits. He was replete with ambivalence, betraying bisexual confusion, pregenital sexuality, excessively concrete thinking, and a totally immature personality.

There is no doubt that this young man's ego development showed a patent flaw. Since it is a feature of the immature ego state not to possess a proper sense of proportion and to be incapable of evaluating and judging correctly, it is not surprising that everything in which his emotions were involved was out of focus. Many years ago I described similar phenomena during the period of ego reconstruction in patients recovering from coma.

II. The case that illustrates a preoedipal character disorder with symbiotic tendencies is represented by a man of 34 who had been plagued by phobias of various kinds for many years, and was unable to ride on trains, cars, boats and the like. He also presented numerous obsessive-compulsive features, hypochondriacal symptoms, depressed moods, and acute anxieties concerning his potency, health, sexual identity, and so on.

He was markedly ambivalent, submissive, shy, and over-flaccid in his relationships. On the other hand, he was not unaggressive in his studies and work. At college he had been an outstanding student and was highly esteemed in his professional work. Although he had many acquaintances, his relations with them were casual or at best tenuous. His friends often complained about his childishness and recognized in him some lack of 'rhyme and reason'.

He seemed to be joined to his mother by an elastic band which permitted him a certain freedom, but drew him back whenever he attempted to stretch its tether too far. Panic would then drive him quickly to close protective shelter. The mother controlled his life by deciding what was good and what was bad for him. He could not have any wishes of his own. As a youngster, he had not been permitted to play with other children, or to ride a bike, or travel on a train or in an automobile because of the possible danger. Later on he was allowed to make use of a trolley car, but only after his mother had given him her blessing and muttered her admonitions and magic formulas.

He was kept under constant surveillance. His temperature, pulse, breathing, eating, and bowel habits were scrutinized as if he were in perpetual danger. His mother maintained that he always looked sickly and pale. She would put him to bed even when there was nothing really wrong, immolating him in blankets and hot water bottles until he felt he was melting away and losing his identity. She persisted in bathing him through his adolescence, subjecting him to sexual stimulation and seduction. He was her exclusive property, to such an extreme extent that she considered her second child an unwelcome intruder who had been thrust upon her against her will.

In school the patient never rebelled or protested but was always ingratiating. Since he was too timid ever to be intrusive, he was universally well liked. In fact, he was intolerably the good boy, the picture of a well-behaved, shy, unaggressive, model child, who by some trick of nature had emerged a boy instead of a girl, as he himself put it.

Since his father was a somewhat crude person, the mother felt even more justified in hovering protectively over her son. She considered it necessary, until he was almost 16 years old, to sleep in the same bed with him, her body in close proximity to his. Tortured by the desire to have intercourse with her, he would press his erect penis against her buttocks. Incidentally, like the previous patient, he too grew up under the relentlessly protective pressure of laxatives and enemas.

The patient remained unmarried because he felt his mother would languish if he left her, and also

because he never felt secure enough to tear himself away from her grip. Women were attracted to him because of his gentleness and unaggressiveness, and many wanted to marry him. He escaped from their toils, however, most skilfully, returning each time to Mama. In his sexual relationships he was passive and impatient, an ever-seeking and unsatiated Casanova.

This patient was a tender, friendly, submissive 'goody-goody' who felt dependent and in need of direction and support. He rarely argued, but was usually quick to agree. He was considerate and faithful to his friends. He found it extremely difficult to be alone, and in his need for people he clung to them as to a lifeline. Aggression against anyone was alien to him. Yet in spite of all these virtues, there was an intangible something in the interplay between him and his world that gave the impression of unreadiness, insulation and unnaturalness; and more of a forced than a spontaneous charm. He, like the other patient, was aware of being out of tune and claimed he was most eager to change his ways and free himself of his symptoms.

He described his mother as an immature person, eternally possessive, one who had never given him a chance to grow up as an independent human being. He was not able to break through the protective symbiotic net in which he was caught and which prevented him from becoming integrated into a mature person. He showed a marked tendency to concrete thinking, and was given to magic beliefs, superstitions, and generalizations. He was ambivalent and bisexually confused, and possessed many oral and anal characteristics.

At first glance, both cases might suggest obsessive-compulsive character disorders. However, closer observation shows our two patients to be people with strange and faulty object relationships and with inadequate personality integration. Patient number one was severed and alien—a constant seeker after loneliness, an ardent preserver of his tangential existence and his antagonistic isolation. Patient number two was a clinging, immature 'tentacle character', who dared not leave the maternal fold and free himself from his mother's magic power, and who in like vein aimed to remain a termless patient forever nursed by his analyst. Patient number one seemed daringly to challenge the world, rejecting all closeness and attachment. Patient number two submitted endlessly to people whose energies apparently propelled him to better functioning.

The *autistic character disorder*, symbiotically starved, may be likened to an immoderate anal system; the *symbiotic character disorder*, symbiotically overfed, to a large open-mouthed stomach eager to receive and never filled to satisfaction. Or, in 'libido-stage' language, patient number one seems to be a faecal mass, unworthy, lifeless, and detached, like his dead father; whereas patient number two is swallowed up by his mother into whose 'innards' he fits as into a mould. (The 'as if' cases reported by H. Deutsch do not tally with the descriptions of the patients depicted above.)

The analysis of the autistic-like patient was far less rewarding to the analyst than to the analysand. Although he improved, his total structure underwent no markedly perceptible alteration. Reconstruction of his childhood was inadequate. Because of his diffusion, a systematic development could not be achieved. His masochism prevented his being successful, and his aggressions converted favourable factors into destructive and disturbing elements.

The symbiotic-like patient, on the other hand, with his passive, yielding attitudes presented much less difficulty, and the results obtained were much more favourable in all respects. However, he too could not totally free himself of his clinging mechanism. Although his overt symptoms disappeared, they left a residual shadow. From time to time he obsessively brooded about them. His pathological defence mechanism remained for a long time securely anchored in his character traits.

The persistence of these patients in their pathology, their cathectic fidelity (to use Freud's term), their inability to part with anything belonging to them, the adhesiveness of their libido (as Freud reported in *Analysis Terminable and Interminable*), their clinging to their symptoms and irrational behaviour, and to their dependence and isolation, are apparently due to an abnormal utilization of the libidinal drive which, improperly tamed, transformed, and bound, retains too much id quality, thus causing a disturbance of the synthesizing functions of the ego. These patients seem to fear that relinquishing anything belonging to them, including symptoms, might lead to a disintegration of their painfully maintained selves.

In summarizing, I shall try to differentiate the two main groups, the infantile psychoses on the one hand, and the preoedipal character disorders on the other.

We may surmise that in both infantile psychoses there is a marked *defect* in the ego nucleus with failure in the necessary process of transforming, taming, and controlling the id

properties of the drives. As a consequence, the drives are precariously and insufficiently 'de-id-ed'. As previously pointed out, I hold that the task of initiating the process of neutralization is one of the most fundamental, and one of the earliest functions of the ego nucleus.

In the autistic psychotic child the nucleus apparently has very little 'de-id-ed' energy at its disposal. This causes the aggressive destructive forces of the id to become dominant and persist after birth in their unmodified role. It would seem as if the libido, having found its position hopeless and untenable, had surrendered it. The child remains severed from his environment, and if maternal care is not imposed upon him, he withers away into semi-stupor and even death. His ego does not develop to any extent, nor does it show any power against the downward thrust of the aggressive drive.

For the symbiotic psychotic child we may assume a somewhat less disturbed and disabling condition. Libido is available in greater proportions, tamed, transformed, and bound to a larger degree, thus balancing to some extent the potency of the aggressive drive. However, since insufficient amounts of drive energies are thoroughly neutralized, the formation of the ego nucleus is abortive, and its functions weak and unstable. Although the birth trauma carries less disaster, the newborn child needs an abundant supply of maternal libido for its growth; and it can continue to thrive only if the intrauterine parasite-host relationship is replaced by extrauterine long-lasting symbiosis of mother and child.

A successful contest between the libidinal and aggressive drives, a state of equilibrium, adequate regulation and fusion—these cannot be achieved without a well-functioning ego nucleus, which, however, cannot develop without proper neutralization of the instinctual drives. Therefore to deprive a part of the drives of their id quality and transform and prepare them for the ego functions is essential at a very early stage of life. We may surmise that one of the first steps in the formation of the ego nucleus is precisely this process of neutralization or transformation of the drives.

This process, I assume, has its origin in the sexual drive. Thus, if there is a defect in libido endowment or its anlage, neutralization or the process of 'de-id-ing' must be defective if it does not fail altogether. One might imagine that for this process to secure its initial impetus a part of the sexual drive is transformed, if the analogy is permissible, into a kind of psychic enzyme which after its formation keeps the process going. The assumption would appear to be justified that the transformation and taming of the aggressive drive must be undertaken initially and that its modification must be of greater scope and intensity than the alterations of the sexual drive. This assumption is based on the very nature of the aggressive drive.

It may be said that these pathological pictures of defects in the ego nucleus imply a chain reaction, commencing with libido defects and disturbances. Expressed somewhat differently, a dysfunction of the sexual drive precipitates the basic trouble.

Regarding the second main group, the preoedipal character disorders with autistic or symbiotic tendencies, we might assume a disturbance of the ego nucleus only in the sense of a *deficiency* due to a delay, in whole or in part, in the process of transforming, taming, and binding the id drives. These children at birth are not quite ready, and have not yet attained sufficiently adequate maturation of the ego nucleus to cope successfully with life's excitations. Their equilibrium is too precarious, and too labile.

We may further say that the infantile psychotic child, being constitutionally damaged, does not possess the wherewithal to create an ego capable of functioning, whereas the preoedipal character disorder child, being equipped merely with an immature and developmentally delayed ego nucleus, will, if unfavourably exposed, develop an immature and incompetent ego.

Translating our concepts into physical terms, we might say that the normal infant has achieved a state of semi-solidity. The character disorder child, however, is in a state of semi-liquidity.

The character disorder child with his still 'fluid psychic substance' flows into the proffered mould and assumes the form and shape of his parents, particularly his mother, and pathologically identifies and surrenders to the love object (A. Freud). His development and psychic configuration will depend for ego complementation on the care-giving person.

Schematically expressed, where the mother's personality plays into the hands of his aggressive drives, he will become an autistic character, or conversely a symbiotic character, where the libidinal forces are favoured. In other words, if the mother's aggressions are added to his, the precarious balance will tend toward the aggressive autistic position. If she adds her own

clinging symbiotic tendencies to his, a symbiotic distortion will result.

We may anticipate that this type of disturbed child, if wisely dealt with by a loving, balanced, and mature mother, will stand a good chance of attaining, even though belatedly, a reasonable degree of maturation and a state of relative well-being.

REFERENCES

(1) BENDER, L. 'Childhood Schizophrenia', *Amer. J. Orthopsych.*, **17**, 1947.

(2) DEUTSCH, H. *Psychology of Women.* (New York: Grune and Stratton.)

(3) —— 'Über einen Typus der Pseudo-affektivität (Als-Ob)', *Int. Z. f. Psychoanal.*, **20**, 1934.

(4) FREUD, ANNA. 'Negativism and Emotional Surrender' (Abstracts), *Int. J. Psycho-anal.*, **33**, p. 265, 1951.

(5) —— 'The Mutual Influence in the Development of the Ego and Id', *Psychoanal. Study of Child*, **7**, 1952.

(6) —— and BURLINGHAM, D. *Infants without Family.* (New York: Int. Univ. Press, 1944.)

(7) FREUD, S. *Coll. Papers*, Vol. 2.

(8) —— 'Analysis Terminable and Interminable', *Coll. Papers*, Vol. 5.

(9) —— *A General Introduction to Psychoanalysis.*

(10) —— *The Origins of Psychoanalysis.* (London, 1950.)

(11) —— *The Ego and the Id.*

(12) GREENACRE, P. 'The Biological Economy of Birth', *Psychoanal. Study of Child*, **1.**

(13) —— Quotation in Mahler's paper, *Psychoanal. Study of Child*, **7**, p. 294.

(14) HARTMANN, H. "Ich Psychologie und Anpassungs Problem', *Int. Z. f. Psychoanal. u. Imago*, **27**, 1939.

(15) —— 'The Psychoanalytic Theory of Instinctual Drives', *Psychoanal. Quart.*, **17**, 1948.

(16) —— 'Comments on the Psychoanalytic Theory of the Ego', *Psychoanal. Study of Child*, **5.**

(17) —— 'Psychoanalysis and Developmental Psychology', *ibid.*, **5.**

(18) —— 'Mutual Influences in the Development of the Ego and Id', *ibid.*, **7.**

(19) —— KRIS, E., and LOEWENSTEIN, R. 'Comments on the Formation of the Psychic Structure', *ibid.*, **2.**

(20) ——, ——, ——— 'Notes on the Theory of Aggression', *ibid.*, **3** and **4.**

(21) HOFFER, W. 'Mouth-Hand and Ego Integration', *Psychoanal. Study of Child*, **7.**

(22) —— 'Development of the Body Ego', *ibid.*, **5.**

(23) —— "Mutual Influences in the Development of the Ego and Id, Earliest Stages', *ibid.*, **7.**

(24) JACOBSON, EDITH. 'Contribution to the Metapsychology of Cyclothymic Depression.' *Affective Disorders.* Ed. Phyllis Greenacre. (New York: Int. Univ. Press, 1953.)

(25) KANNER, L. 'Autistic Disturbances of Affective Contact', *Amer. J. Orthopsych.*, **12**, 1942.

(26) —— 'Early Infantile Automatism', *Amer. J. Orthopsych.*, **19**, 1949.

(27) KRIS, E. 'Development and Problems of Child Psychology', *Psychoanal. Study of the Child*, **5.**

(28) NUNBERG, H. *Principles of Psychoanalysis.* (New York: Int. Univ. Press, 1955.)

(29) —— 'Synthetic Function of the Ego', *Practice and Theory of Psychoanalysis*, 1948.

(30) RANK, B., and MACNAUGHTON, D. 'A Clinical Contribution to Early Ego Development', *Psychoanal. Study of Child*, **5.**

(31) RIBBLE, M. 'Disorganizing Factors in Infantile Personality', *Amer. J. Psych.*, **98.**

(32) SCHOENBERGER-MAHLER, M. 'On Child Psychosis and Schizophrenia; Autistic and Symbiotic Infantile Psychoses', *Psychoanal. Study of Child*, **7.**

(33) SILBERMANN, I. 'The Psychical Experiences during Shocks in Shock Therapy', *Int. J. Psychoanal.*, **21**, 1940.

(34) SPITZ, R. 'Anaclitic Depression', *Psychoanal. Study of Child*, **2**, 1947.

(Received 26 October, 1955)

OBITUARY

ERNST KRIS
1900–1957

In the early hours of 27 February Ernst Kris died at his home in New York, leaving behind his wife, Dr. Marianne Kris, and two children, a graduate and a student of medicine. His distinction in two fields, that of the history of art as well as that of psycho-analysis, has been recognized far beyond the closer circle of his professional associates. Both the New York Psychoanalytic Society and the American Psychoanalytic Association had conferred on him their Honorary Membership, honours which he shared with but a very few.

Kris came to psycho-analysis in circumstances remarkable and characteristic enough to be worthy of record. Born and brought up in Vienna, he studied art history and became a custodian of the *Kunsthistorisches Museum*, the Austrian State Museum for Art in that city. He had turned towards the study of art and its history very early, indeed in adolescence, when for months he was laid up because of juvenile rheumatism, which also affected his heart. When back at secondary school, World War I caused the population of the city to feel all the hardships of scarcity; and the fuel shortage necessitated the closing of schools during the weeks of frost (Kälteferien). Young Kris used this spell of idleness to trespass into the University and its History of Art Department, where Professor Julius von Schlosser carried on his seminar discussions with his students, whose numbers were few because of the call-up. Kris's keen participation and outstanding knowledge aroused Professor Schlosser's lasting interest. But Kris caused the Professor some embarrassment when it became known that he had not yet reached matriculation age and was not even an undergraduate.

Ernst Kris graduated as doctor of philosophy, and in the 1920s entered the Austrian State service by becoming custodian of the *Kunsthistorisches Museum*. There he earned distinction as a connoisseur of goldsmith's work and as the author of the standard treatise on Renaissance intaglios and cameos. Prior to these publications he had compiled, in collaboration with F. Eichler, the museum's catalogue of its famous collection of cameos and intaglios, and in consequence he was called upon to catalogue a similar collection at the Metropolitan Museum of Art in New York.

While working among the treasures of the *Kunsthistorisches Museum*, indefatigably as he did throughout his life, and destined to become a teacher at the University, Kris had come into personal contact with Professor Freud; thus it was that, years later, he became a psychoanalyst himself. The beginning of this transformation was a romantic one. Kris had fallen in love; and that with a student of medicine whose father, Dr. Oscar Rie, happened to be an old friend of Freud's and pædiatrician to his children. (For all the relevant details about the two men, see Ernest Jones, *The Life and Work of Sigmund Freud*, Vol. 1.) It was through Marianne Rie that Ernst Kris was introduced to Freud to advise him on his collection of cameos and intaglios. We know from the *Seven Rings* how fond Freud was of these relief-carvings in stone.

Some time after, a personal analysis at the Vienna Institute of Psycho-Analysis was arranged, and in 1927 the door was open for associate membership. Later in the 1930s, Ernst Kris had become absorbed by our science to such a degree that, jointly with Dr. Robert Wælder, Freud entrusted him with the editorship of *Imago, Zeitschrift für die Anwendung der Psychoanalyse auf die Natur- und Geisteswissenschaften*.

By this time Kris thought of himself as a research worker in the field of the history of art and æsthetics rather than as a future clinician and teacher of psycho-analysis. His professional set-up was ideally fitted to the now accepted conception of how to apply psycho-analysis fruitfully and safely to the human sciences and vice versa. The idea of being expertly trained in both fields strongly appealed to Kris, though for a short while, and perhaps also in anticipation

of the political changes in Central Europe, he toyed with the idea of starting all over again and studying medicine as well. He combined in himself the gift of searching for and depending on detailed, minute observation—a gift not always recognized and appreciated by his colleagues—and yet never losing sight of the entirety in which the parts are embodied. To bridge and master the gap between the two, a gap created by our sensory apparatus rather than a real one, was—as I see it—the main driving force in his thinking and his ambitions. It is this feature, if not compulsion, in Ernst Kris's method of working that makes the study of his writings so instructive, if somewhat toilsome at times, because of a liking for occasional pyrotechnics, but safe from hurried and complaisant generalizations. Or as his friend, Professor E. H. Gombrich of London University, put it: 'Kris abhorred the oversimplifications of the confident vulgarizers.' Kris was a vehement, assertive, but very cautious thinker, inclined rather to have his doubts about man's reliability in mastering the problems he chooses to face. Belief in the finality of any scientific investigation or mental achievement was unknown or unacceptable to him. He had little inclination for the speculative approach; in his thought and writings he usually started from a surface phenomenon, and did not necessarily look into it for a deeper and final meaning; he rather studied the circumstances under which the phenomenon came to be noticed; and after having more or less established these he went on to trace it backwards and also sideways, trying to make intelligible something of its origin and its multiple function. He had in my experience, which goes back to the start of his psycho-analytic career, a special liking for picking on minute details; he sometimes seemed officious when he did so. But who else could have had the patience and devotion to compile his standard works on goldsmiths' work and cameos? He did not stop after having looked for the detail; he wanted to see it in the total context of its past and present functions. Was there not something genuinely psychoanalytic in Kris's approach? Thus, what fascinated us, who saw his star rising, was his methodological shrewdness, which only much later became matched with and balanced by dispassionateness and sedateness, the fruit of much clinical work, experience, and listening to others.

His writings of this period he himself looked upon as 'applied' psycho-analysis. These and some more recent ones, forming the bridge to 'pure psychology', have been published in his *Psychoanalytic Explorations in Art*. In this book his erudition, his basic solidity, and to a certain degree his fearless, adventurous searching into the little known and the unknown, find ample proof.

When the crucial ten years or so of apprenticeship in psycho-analysis had passed (no training regulations are likely ever to shorten this period), and when Ernst Kris could feel at home in the technique of psycho-analysis, the Austrian *Anschluss* took place and soon afterwards he and his family settled in London. Here, in cooperation with Professor Freud, Anna Freud, Edward Bibring, and Marie Bonaparte he edited the first volumes of the London edition of Freud's *Gesammelte Werke* and also the *Internationale Zeitschrift für Psychoanalyse und Imago*. No newcomer in the English-speaking world, and speaking English almost to perfection, he soon felt familiar in the new surroundings. To those less fortunate he proved a helpful friend.

On the outbreak of World War II he became engaged, through the British Broadcasting Corporation, in the scientific analysis of German propaganda, and he continued this work for a while after his arrival at New York in July 1940. Several of the publications of himself and his coworkers testify to his contribution to the war effort.

In the United States psycho-analysis was about to take an upward course without precedent. Its popularity grew far beyond expectation; its applicability was hardly a problem any more; it had penetrated many walks of life. Yet even so, its scientific future seemed for a while in jeopardy. In these circumstances and so soon after Freud's death, the counsel of those who through personal contact with him knew of Freud's conception of psycho-analysis as a science was welcome and proved inspiring. Ernst Kris gradually became one of the main exponents of modern Ego Psychology. He won great prestige as a theoretician, a discussant, and a teacher in the strongest, most numerous and representative Component Society of the International Psycho-Analytical Association.

It is not important or even possible to delineate the personal contribution Ernst Kris made to those aspects of Ego Psychology which, having their roots in Freud's later

thoughts, germinated at first from the ingenuity of Heinz Hartmann. However, to achieve what in the crucial years of the post-war period was achieved by Hartmann, Kris and Loewenstein, a very high degree of concord must have been at the bottom of this memorable alliance. It is a healthy sign of the working arrangements among these three men, that after they had done the spade-work, each of them pursued the kind of task which appealed most to his individuality. As the result of his own work three achievements stand out in Ernst Kris's later pursuits: his Introduction to Freud's *The Origins of Psycho-Analysis;* his research project at the Child Study Centre of Yale University School of Medicine; and finally his prominence as a teacher of psycho-analysis at the New York Institute of Psycho-Analysis, together with his activities at the scientific conventions of the American Psychoanalytic Association.

Kris's Introduction to Freud's letters to Wilhelm Fliess and his treatise on ' The Significance of Freud's Earliest Discoveries ' show him as a master of historical research. Only a very few of his contemporaries could have lived up to the occasion offered by those exciting documents, the Fliess letters of Sigmund Freud. Sensitivity to historical events is a rare gift. Many aim at too great objectivity; others achieve too little when interpreting intentions read into the past. The task was best entrusted to one who, in addition to his familiarity with the persons concerned, had acquired in an allied field some of the skill and responsibility needed for the appreciation of objects of historical significance. Had Ernst Kris contributed nothing else to psycho-analysis, his Introduction to the *Origins* has caused him to deserve our admiration and thanks for all time.

That he should become actively engaged in observing small children and studying them in personal contact would have sounded incredible some twenty or so years ago. Yet, his critical, methodological, and now very mature mind enabled him to do this when the opportunity offered itself. Dr. Milton J. E. Senn, Professor of Paediatrics at Yale, invited him to conduct a research programme of Kris's own choice. He was appointed Clinical Professor at the University's Child Study Center, the same, where, in times now past, Arnold Gesell had carried out his behaviouristic studies of child development. For some time it had been anticipated that longitudinal studies of development combined with clinical child analytic work would be helpful and promising in the achievement of an approximation of observable facts with reconstructive thought. This approach had become one of Kris's preoccupations since he sensed that the roots of Ego Psychology can as well be studied and scrutinized during the crucial years of early ego development and ego differentiation. His methodological mind, which remained unbiased by any preconception as to what the results should be, elaborated a far-reaching research programme, which was to expand over a number of years; provision had been made to meet some of the hazards of such long-drawn-out work. Kris could not without hesitation have assumed that psycho-analytic research work such as he was ready to do could easily be pursued within the setting of a University. He must have satisfied himself that the peculiar requirements of psycho-analytic ' action research ' as contrasted with ' pure research ' could and would be met within the set-up provided by the University authorities. His decision must surely have been reinforced by the knowledge that he would have a team of enthusiastic and grateful co-workers at his side. Research problems of this magnitude are too general and pressing to be dependent on the life of a single man, however outstanding he may be in his methodological approach. It cannot therefore be imagined that the time and effort spent so far will be lost as a result of the passing of Ernst Kris. His co-workers will assuredly have already found ways of carrying on the work.

Men who think and know much are usually expected to give much. If put to the test this expectation proves unjustified to such a degree that we do not even take much notice of this failure of human nature. This does not apply to Ernst Kris. His search for knowledge, and his desire to thresh out ideas which seemed to oppose each other, dominated his object-relationships. He was a great and clever talker, and a most generous and rewarding one. He liked those who came to listen and still more those who liked fencing with problems and problem solutions. In our profession he was one of those who could tolerate the existence of facts which as yet have not found an explanation. That he became an inspiring and passionate teacher during the last ten years of his short life was the good fortune of himself and his students. It is therefore with no surprise that we learn of the consternation, sadness, and frustration which his untimely death has caused

among his colleagues and students. For them the loss of so inspiring and generous a teacher will be a challenge, and they will certainly try to live for and with the ideas which led our greatly mourned friend and colleague deeper and deeper into the unconquered regions of Freud's psycho-analysis.

W. Hoffer

CLINICAL ESSAY PRIZE

Members and Associate Members of the International Psycho-Analytical Association are reminded that competitors for the Clinical Essay Prize must send in their work to the Hon. Scientific Secretary of the Institute of Psycho-Analysis, 63 New Cavendish Street, London, W.1, by 31 May of the year in which they wish to enter the competition.

The conditions governing the competition are the following:

A prize of (not exceeding) 30 guineas is offered.

Requirements for the Essay

The essay shall consist of a clinical record of a case investigated by psycho-analytical methods. It should illustrate clearly the events and changes in the mental life of the patient and their relation to external environment. In awarding the prize, the Judges will pay attention to acuity of observation and the clarity with which the facts are stated. If the writer wishes to draw theoretical conclusions, he must bear in mind the necessity of making the evidence for such conclusions carry conviction.

It is recommended that the length of the essay should not exceed 20,000 words.

Date of Sending in Essays: Language: Format, etc.

Essays must be submitted on or before the 31st day of May in any year, in the English language. They must be typescript on quarto paper with ample left-hand margin. They must be in triplicate and be sent to the Hon. Scientific Secretary of the Institute. All copies of essays submitted become *ipso facto* the property of the Institute (or its successor) while it has the appointment of the Trustees for the Prize Fund.

No Award

If no essay of merit worthy of a prize is submitted in any year, no award shall be made for that year.

Joint Award

In the event of the Judges regarding the essays of two or more competitors as of equal merit, they may divide the prize money into equal parts and award it to such competitors jointly.

Eligibility

Any person of either sex, who is not a member or a past-member of the Board of the Institute, shall be eligible for the competition.

Tenure

The prize shall be given to the writer of the best essay in the opinion of the Judges submitted in any year, but the prize may be awarded to the same person twice, provided that he submits a second essay of sufficient merit in a later competition, and that the prize shall not be awarded more than twice to the same person.

Title

The competitor to whom the prize is awarded in any year may be called the Clinical Prizeman for that year.

Copyright

The copyright of any essay to which a prize is awarded shall become the property of the Institute. Should the author wish to quote it in whole or in part, the Institute shall not unreasonably withhold its consent. The Institute shall not publish in England or abroad, whether in English or in translation, the whole or any part of such essay during the author's life-time without his consent in writing. Other persons who may wish to quote extracts from any prize essay shall obtain the written consent both of the Institute or its successors, and, during his life-time, of the author.

Charles Rycroft

Honorary Scientific Secretary,
Institute of Psycho-Analysis,
63 *New Cavendish Street,*
*London, W.*1.

BOOK REVIEWS

Learning and Instinct in Animals. By W. H. Thorpe. (London: Methuen, 1956. Pp. vii + 493. 55s.)

In accordance with the general trend in biology modern studies of animal behaviour are directed to an understanding of the ways in which organisms normally live in their natural habitats, and to establishing the means which enable them to behave as they do. This more total or ' holistic ' study of the living animal in relation to its environment has now become generally known as ' ethology '. ' From the philosophical point of view, the central problem of ethology is the relation between purposiveness and directiveness, and it looks at times as if this is the same as the relation between learning and instinct.' For the ethologist the question is, ' How much, if any, of the animal's behaviour is purposive and what is the relation of this behaviour to the rest? ' The problems involved are so numerous that most workers in this vast field still tend to concentrate on one line of approach, e.g. psychologists on learning, or zoologists on instincts. The outstanding merit of this book is that it is a study of the integration of acquired and innate behaviour. One of the author's major objects ' has been to point out to psychologists and learning theorists on the one hand and to zoologists and physiologists on the other how dependent each is, or ought to be, on the work and viewpoint of the other '. Moreover, the author is convinced that ' *both* subjective and objective concepts are necessary in the scientific study of life ' and that a balanced combination of subjective and objective concepts is the only hope for a complete biology and a sound biological philosophy.

The book is divided into three parts that can be read independently. Part I, ' Some General Concepts ', discusses first the relation between ' Directiveness and Purposiveness ' and then ' The Nature of Drive and its Place in the Theory of Instinct '. Part II is devoted to ' Learning ' from its most lowly form of ' Habituation ' to the higher levels of ' Insight and Perception ', concluding with a review of theories relating to ' The Mechanisms of Learning '. Parts I and II form a detailed and constructively critical review of relevant theories and provide psycho-analysts with a comprehensive survey of ethology not hitherto available. Technical terms are defined and each chapter closes with a summary.

Part III, comprising more than half the book, gives examples of ' The Learning Abilities of the Main Animal Groups ', ranging from Protozoa to Mammals. These chapters make fascinating reading and it is, on the whole, an advantage that the author gives most space to insects and birds, the groups on which his own major researches have been prosecuted. The chapter on ' Mammals ' is all too short but this group has not, as yet, been so fully studied by ethologists. In a brief concluding chapter the author gives his answer to the question, ' What, if any, is the significant over-all conclusion arising from the great and growing activity of students of behaviour during the past fifty years ? ' His estimate of human behaviour is that it is much less sharply differentiated from animal behaviour than has been supposed; ' And if and in so far as it proves true that the concept of purpose is necessary in the description of animal behaviour, another important similarity will have been established. In any event, it seems that ethology is already confirming the conclusions of other biological disciplines, and in doing this it may in due course provide many facts which will assist human beings in the better ordering of their social relations.' It may also provide data for a more adequate theory of knowledge and favour a ' Philosophy of Organism '. ' Science in order to progress must also philosophize and must enter upon a thorough criticism of its own foundations.' Moreover, ' to assume that studies of animal behaviour imply any decrease in the stature of man would be a view of the utmost naïveté . . . if only because of the existence of Science itself, man displays emergent qualities far transcending those of the highest animal . . . there are also in him vast further potentialities yet to be realised '.

The reader may be surprised by the parallelism between the ethological and psycho-analytic approaches and by the convergence of some of their respective conclusions. Although the findings of ethology may prove helpful to psycho-analysis it would be a grave error for analysts to forsake their own specific technique and perspectives. Nevertheless, the impression will arise that the psychosociology which is the great desideratum of our present human condition might well be termed human ethology.

Only a sample of the many points of interest raised by this book can be mentioned here. More than one psycho-analyst has already suggested that ethology may aid in clarifying some of the puzzles of infantile development. There is much in Parts I and II that is relevant to ego psychology and much too that might be helpful in converting our ' mythology ' of instinct into a more generally acceptable theory. For instance, it may help in settling the vexed question of the status of ' self-preservation '. While ' internal drive ' is considered to be the most fundamental part of the concept of instinct it is not equated with physiological need alone but involves some degree of

inherited co-ordination and some, more or less rigid, inherited action patterns and releasing mechanisms. Perception is held to be ' an active organising process . . . a process in time rather than an instantaneous event ' and ' a basic characteristic of the drive of the living animal '. It is concluded that there is now ' substantial and precise evidence for a general drive in a number of animals, and that this can be looked upon as an indication of a primary motivation which to some extent, however slight, is superior to the governing centres of any of the instincts or of their combinations, and finds its most characteristic expression in exploratory behaviour in all its various forms. It is closely linked with the ideas of " expectancy " and " purpose " '. These conclusions suggest that self-preservation and adaptation to environment may be primordially synonymous and that they are now essentially ego functions whose success is dependent upon the adequacy of external reality-sense developed through perceptual experience. We are more accustomed to think of ' curiosity ' as closely linked with the sexual instincts but this linkage could be secondary, a libidinization of a more primitive exploratory drive due to the idiosyncrasies of our specifically human ' infantile sexuality '.

A distinction is drawn between preparatory or ' appetitive ' and terminal or ' consummatory ' behaviour. For the author the play of animals is not merely ' practice ' but appetitive behaviour under conditions in which the consummatory act need not or cannot be achieved. ' Thus true play is to be expected where appetitive behaviour becomes emancipated from the restriction imposed by the necessity of attaining a specific goal . . . the process of freeing appetitive behaviour from the primary needs increases perception of and mastery over the environment, and must have been one of the first and perhaps the most important of the behaviour changes which made possible the development of social life in the vertebrates, and indeed ultimately the mental and spiritual life of man himself.'

In the reviewer's opinion this book is the most outstanding and scholarly contribution yet made in the field of Ethology, a field in which psycho-analysts will find it rewarding to take a lively interest.

M. Brierley.

Beyond Laughter. By Martin Grotjahn. (New York: McGraw-Hill, 1956. Pp. 285. $6.00.)

Grotjahn tries to deal with the deeper symbolism of the ' laughable ' in jokes, the comical, humorous, caricature, farce, comedy, fairytale figures, etc.; Freud, while being mainly concerned with the function of jokes, did not give the symbolic meaning of jokes the attention he gave to the symbols used in dreams. But it is the deeper symbolism which connects the laughable with the creative unconscious. Hence the book often takes us to the borderland between the joke and art which, in a way, lies ' beyond laughter '.

The author found in his clinical work that an interpretation given in the form of a joke was sometimes more easily understood than if given in a more direct manner. He hopes that the non-analytic reader, too, will be readier to meet his own unconscious if it is presented to him in the guise of a joke. Thus reading this book becomes a somewhat unsettling experience. While we still laugh about a light-hearted joke or caricature, the author suddenly reveals the anguish hidden behind the laughter. Nor is this technique conducive to coherent argument. It is as a source book of creative experiences that the book will succeed, and not so much as a textbook on psycho-analytical aesthetics. It reminds one of Groddeck's incomparable excursions into the deep unconscious, laughing yet dead serious and implying important theoretical progress. Particularly rewarding, to my mind, is the author's attempt to establish the connexion of laughter with the personality as a whole, particularly with its aggressive components. For instance, in the typical Jewish jokes the aggression is directed against the self, hence non-Jewish narrators will not easily succeed in telling them. Women, generally, are not accepted as witty, at least in our civilization, because their wittiness is felt as castrating aggression; while women among themselves will resort to other forms of attack. The aggression of a joke renounces physical acting out. Hence practical jokes and ' kidding ' lack an essential element of the witty. Kidding in particular is thinly disguised homosexual aggression, for this reason the kidder cannot tolerate retaliation which would force him into an openly passive rôle. Indeed laughter greeting the success of a practical joke is nearer to sneering than to spontaneous reaction. (In my view, laughter represents a primitive undifferentiated type of motility which prevents purposeful behaviour; the superego condones the aggression in the joke because it cannot—at least for the time being—lead to acting out in consciously controlled motility.)

The witty personality is fundamentally a sadist who needs the laughter of his friends to overcome his social anxieties; otherwise he is a lonely figure. The book reproduces a striking photograph of the ' comedian ' W. C. Fields, portraying the ' quite unwitty dignity ' of Queen Victoria in her lonely widowhood. Fields adopts a stiffly erect attitude; we laugh as we discover that he balances on his head a candleholder in place of a crown. Grotjahn suggests that the comedian, on a deeper level, also expresses his own enforced loneliness, and so once again makes us feel the tragedy ' beyond laughter '.

The humorist, on the other hand, is a masochist at heart; for this reason he fails to act under the frustration of external reality. Grotjahn does not fully share Freud's high esteem for humour; certainly the humorist may gain inner independence, but through

his impassivity he will lose in the world of reality. Yet when all is lost and nothing is to gain by being active, as in the case of ' Galgenhumor ' or the persecution of Jews, the impassive detachment of the humorist turns defeat into a victory of the human spirit over calamity.

The comedian too accepts defeat and castration by representing the vanquished father figure. Laughing, the son can enjoy his victory without guilt feelings. But there may be more to it; the truly great clown, his face painted a chalky white, also stands for the acceptance of mortality and ultimate wisdom. In another of its impressive illustrations, the book shows a photograph of the comedian Emmett Kelly which has an almost surrealist quality. He poses, a decrepit clown, between a strapping bathing beauty and a relaxed young sportsman. ' He has no act and no action; he may sit motionless through the turmoil of a three-ring circus . . . Once in a while he may get up, reach for a broom, and slowly, carefully, forlornly—and successfully—sweep away a ray of light. He seems calmly to express in Gestalt and existence the old wisdom: Life must be lived. That is all . . .'

As the book takes us through our paces, we are made to face psychic truths which normally are not only ' beyond laughter ', but which would be unbearable without it.

Anton Ehrenzweig.

The Neuroses in Clinical Practice. By Henry P. Laughlin. (Philadelphia and London: W. B. Saunders, 1956. Pp. 802. 87s. 6d.)

This book is an attempt at a textbook presentation of the neuroses from the psychodynamic point of view. The author set about his task very thoroughly and submitted most of the chapters to one or another of fifty-six senior psycho-analysts and psychiatrists. The book is nevertheless a highly personal product reflecting the author's didactic enthusiasm and his strong leanings towards systematization and simplification. It has some of the virtues and most of the vices of popular medical textbooks which offer complicated subjects chewed up in easily digestible form. The author, who is Assistant Clinical Professor of Psychiatry at Washington University, is fond of technical terms and invents new ones on the slightest provocation. He lists twenty-one phobias each named after the feared object, thus beating most clinical psychiatrists of half a century ago. All symptoms and personality traits are regarded as defence mechanisms, of which he enumerates twenty-two. In his endeavour to explain ' gain through illness ' he has created two linguistic monstrosities, ' endogain ' and ' epigain ', the former standing for unconscious, the latter for conscious gain. He proposes the term ' soteria ' for the opposite of phobia, i.e. an excessive sense of security. Accordingly, the object to which this feeling is attached is the ' soterial object '. Another and rather picturesque new term is ' King David's reaction ' or ' the royal Anger ', of which a positive and negative form is described. This is a feeling arising from ' a defensive process through which condemnation and hatred of consciously disowned aspects of oneself become consciously experienced as dislike for another person '. Some of the author's formulations are sadly lacking in sophistication.

' In dissociation there is a division of the mind into two or more parts ', etc. His obsession with systematization gets away with him when he lists twenty-one sources and stimuli of depersonalisation rather thoughtlessly. Nine categories of amnesia ordered according to several principles are enumerated. He revives the unfortunate term ' traumatic neurosis ', which has been given up by most psychiatrists and neurologists, having caused no end of confusion in the past. To the author, ' trauma ' in this context means physical or psychic injury. Combat exhaustion is included in this group, as well as ' brain washing ', with Cardinal Mindszenty as the prime example. Melanie Klein's concepts are accepted uncritically and referred to largely in footnotes. The book concludes with a long glossary of psychiatric terms, with some purely neurological ones thrown in. Some of the items are in need of correction; the definition of ' dementia ' is quite obsolete; psychiatry is not a ' basic medical science ', etc.

This book was apparently meant to be the product of a marriage between psycho-analysis and clinical psychiatry. If this match has not been an entire success it is perhaps because the two particular representatives chosen are somewhat lacking in breeding.

A. Stengel.

Discussions on Child Development. Vols. I and II. The Proceedings of the First and Second Meetings of the World Health Organization Study Group on the Psychobiological Development of the Child. Geneva, 1953, and London, 1954. Pp. 240 and 271. 25s. and 28s. (London: Tavistock Publications, 1956.)

Before attempting to review these volumes one should make clear what is their nature, and this may best be done by quoting some of Prof. Hargreaves' preface to the first volume. ' This volume, and others which will follow it, give an account of an activity of the World Health Organization—the Research Study Group on the Psychobiological Development of the Child.' An Expert Committee on Mental Health ' recommended that it was desirable that the Mental Health Programme should concentrate especially on the psychiatry of childhood. It emphasized the fact that others apart from psychiatrists must be called on to contribute in this field and mentioned specifically the anthropologist, the sociologist and the social and

developmental psychologist'. 'The aim of the Group was to bring together once a year for four or five years, during a period of a week, a small number of internationally eminent workers in the different disciplines which study different aspects of the psychobiological development of the child.' 'It was not originally intended that the proceedings of the meetings should be published; but the mimeographed transcript which was produced for the benefit of the members evoked such interest in those outside the group who read it that many requests for copies began to be received.' Hence the present volumes, in which the original transcript has been reduced to about a third.

The Study Group consisted of Bowlby (representing psycho-analysis), Fremont-Smith and Struthers (research promotion, the former being Chairman), Hargreaves (psychiatry), Inhelder, Piaget, Zazzo (psychology), Lorenz (ethology), Mead (cultural anthropology), Melin, Monnier, Rémond, Grey Walter (electro-physiology), and Tanner (human biology). In addition, Carothers and Krapf representing psychiatry and Odier representing psychoanalysis were present as guests for the meeting in 1953 reported in the first volume; Bindra, Buckle, Howard Liddell and Whiting for the 1954 meeting.

We could proceed to detail the fourteen prepared contributions presented in these two volumes, but that would give a misleading impression of the unusual qualities of these proceedings, which are due not so much to the great interest that many of them possess as to the free discussion that followed each paper, and the interaction and mutual influence of some of the outstanding personalities and intellects that were engaged. Among these the one who showed himself most completely master of the technique of the informal discussion group, and the readiest with relevant and highly stimulating *obiter dicta*, seems to have been Konrad Lorenz, who was never at a loss for some apt illustration from the animal world in which he is so much at home. The main psycho-analytic contributions came from Bowlby, who gave a succinct summary of psychoanalytic instinct theory in the first volume, and in the second led a discussion on the film 'A Two Year Old Goes to Hospital'. Some of Piaget's researches into the intellectual development of children were presented by Inhelder and to a lesser extent by Piaget himself. Various pieces of experimental work with animals were discussed by Bindra and Liddell in the second volume and stimulated interesting discussion without perhaps carrying much conviction of their relevance to the main topic. Grey Walter presented work on electroencephalography of childhood and also demonstrated some of his mechanical models and explained their relationship to conditioned reflex and learning theory. Whiting described cross-cultural work on identification and superego development in relation to differing methods of upbringing. The kind of difficulties of communication that may arise in such a group discussion is illustrated by the following exchange :

Bowlby: . . . The superego is rather complicated and contains more than one variable.

Grey Walter: Can you measure the superego ?

Bowlby: You cannot.

Grey Walter: Then what is the point of discussing it ?

These volumes are full of stimulating observations and contain much brilliant extempore discussion and so are very well worth reading, but naturally they do not present their subject-matter systematically. Finally, a warm tribute is due to Dr. Tanner and Prof. Inhelder for the excellent editing which must have been done to transform a verbatim transcript into such a readable and enjoyable form.

W. H. Gillespie.

Emotional Problems of Early Childhood. Edited by Gerald Caplan. (New York: Basic Books Inc. ; London: Tavistock Publications, 1955. Pp. xiv + 544. $7.50 or 42s.)

This volume consists of a selection from the papers presented at the International Institute of Child Psychiatry held at Toronto in August 1954.

The clinical studies and research reports have been arranged under three main sections:

1. Preventive Aspects of Child Psychiatry.
2. The Relation of Physical and Emotional Factors and Problems of Hospitalization.
3. Problems of Psychosis in Early Childhood.

Section 1. Prophylaxis is one of the dominant themes throughout the book; it is stated, developed and illustrated in the first case report which forms the opening chapter. This is an account of how a mother and her four-year-old son were enabled to deal in a more healthy way with their serious emotional problems, the aftermath of the father's suicide. The boy was identified as a potential psychiatric casualty at a routine mental health screening procedure to which all the incoming primary school children were subjected at intake. The term 'preventive intervention' is used to describe the therapeutic work carried out in this instance, which was directed at altering the nascent, maladaptive emotional response patterns, so as to prevent them from becoming firmly established. Scope for work of this kind exists at all stages of the child's development and a positive mental health programme must make adequate provision for it. Only in this way will appropriate psychiatric services be available in the community for its children from birth onwards.

The other clinical case studies and research reports in this section deal with various aspects of preventive psychiatric work.

Section 2. The relation and interplay of physical and emotional factors in the causation of psychosomatic and other disabilities are considered. The conditions studie include psychogenic and suspected

deafness and a group of psychosomatic diseases including peptic ulcer, ulcerative colitis, and coeliac disease. Researches on the effects of maternal deprivation, and reactions of children and families to hospitalization, follow.

Section 3. Affective, autistic, and schizophrenic states are described and discussed. Views as to the aetiology of childhood schizophrenia differ, but there is now general agreement that the earlier the diagnosis is established and treatment instituted, the better are the prospects of recovery or amelioration. The old ' wait and see ' attitude, born of therapeutic nihilism, can no longer be justified. As regards prognosis, most workers concur that this is improved where unhealthy attitudes in the parents can be modified, and changes thus effected in the emotional climate of the home.

It can be said, in brief, that this section forms a valuable contribution to the literature of child psychoses.

This book bears testimony to the fact that psychoanalysis has contributed greatly to our understanding of the aetiological factors involved in producing the emotional disorders of childhood as well as to our psychotherapeutic approach. The field of study is now expanding to include the family and the community and there is increasing emphasis on prevention.

The editing of the volume has been most ably accomplished by Dr. Gerald Caplan, who is also responsible for the conference discussion summaries which conclude the clinical case studies.

Workers in the field of child psychiatry and therapy will welcome this instructive and stimulating book; it can also be read with profit by all concerned with the promotion of mental health in the young.

J. J. M. Jacobs.

Conceptions of Modern Psychiatry: the First William Alanson White Memorial Lectures. By Harry Stack Sullivan. (London: Tavistock Publications, 1955. Pp. xiii + 298. $32.)

This is the first English edition of the White Memorial lectures delivered by Sullivan to a small audience of psychiatrists and allied workers in 1939.

Although the theoretical conceptions presented in this series of five two-hour lectures are based on the work of Freud, Meyer, and White, the author's originality and independence of thought is in evidence throughout. The wealth of new formulations, together with the reformulations of old concepts, the author's passion for coining new words and his peculiar use of existing psychiatric terms, make the reviewer's task a difficult one. Brief mention will be made here of the central point of Sullivan's theory, which is based on the belief that ' Psychiatry is the study of interpersonal relations ' . . . ' A personality can never be isolated from the complex of interpersonal relations in which the person lives and has his being.' This theme occurs again and again until the reader feels that for Sullivan individuality had ceased to exist. In his preoccupation to understand processes of ' acculturation ', social and environmental modes of interaction, he seems to have come to disregard the individual's internal world and to ignore the rôle of unconscious fantasies as well as projective and introjective mechanisms. This is all the more surprising because of his interest and obviously great skill in dealing with schizophrenic patients. Admittedly he states that he is only concerned with ' the early fruits of Freud's genius '. His divergence from accepted analytical concepts, however, goes deeper than that. To give a further example, in his description of child development, infantile sexuality is never mentioned. In spite of this, Sullivan's early interest in psycho-analysis is clearly reflected in the general framework of his approach and especially in the stress placed on the value of transference interpretation in the therapeutic situation.

In view of the limited time which the author allowed himself to present his personal views on almost the whole of the psychiatric field, it is to be expected that many theoretical points remain only sketchily developed. The occasional inadequacy of the presentation is well compensated by the inclusion of a ' Critical Appraisal of the Theory ', written by Patrick Mullahy.

A. Limentani.

Magic and Schizophrenia. By Géza Róheim. Edited by W. Münsterberger. (New York: International Universities Press, 1955. P. viii + 230. $4.50.)

This book is an attempt to contrast and correlate magic as manifested on the one hand in various myths and primitive customs, and on the other in the phantasy of a schizophrenic patient.

The first part is a description of numerous magical customs and rituals in primitive peoples, many of which have, or appear to have, an oral basis. The author stresses the importance of what he calls the oral trauma, i.e. the original frustration of separation from the breast. Magic is used as an omnipotent denial of dependence, in the service of identification with the omnipotent external world and as a revolt against the superego, i.e. the internalized parents. The author stresses the acting out of various omnipotent destructive phantasies against the mother's body and the magical ways of being reunited with the mother. He also draws attention to the way that magic is used to master reality.

The second part of the book is concerned with the phantasies of a male schizophrenic patient observed for eighteen months in a mental hospital. Although the material recorded is extremely interesting, no attempt was made to analyse the patient, and hence it was not possible to obtain confirmation of the

author's speculations about the meaning of the patient's material.

However, he does make many valuable and stimulating suggestions, and concludes that the patient's difficulties were primarily related to loss of the breast and his reactions to it; viz. Oral phantasies and anxieties, body destructive phantasies, the talion form of these phantasies, and phantasies of omnipotence and identification.

The author concurs with Schmideberg's theory that schizophrenia is a flight to the good internalized object. His final conclusion is that in schizophrenia and primitive magic there is an object-directed cathexis, followed by withdrawal and secondary narcissism and finally a return to the object. In folk customs the magic is ego-syntonic, in schizophrenia not so.

One main criticism of his interpretations and conclusions is that he pays practically no attention to projective mechanisms which are very evident in the patient's material, and indeed in all schizophrenics.

The problems of ego-splitting, projection into and confusion with the object, concretization of thought, symbolization, etc., are on the whole ignored, although an attempt is made to show how words are treated as concrete objects.

Also the author, although referring occasionally to internalized objects, does not discuss either their relationship to the ego or their function within the ego or superego.

An account of the actual analysis of the patient would have carried more conviction and perhaps, given more understanding of the patient's use of magic than it does in the mere recording of the patient's productions.

H. S. Klein.

Psychiatry, the Press and the Public. Problems in Communication, edited by Wilfred Bloomberg *et al.* (Washington, American Psychiatric Association, 1956. Pp. 66. $1.00.)

This easily readable and well organized booklet is a report of a conference conducted by the American Psychiatric Association in co-operation with the National Association of Science Writers and the Niemann Foundation for Journalism. It is concerned with the problems of communicating psychological subject-matter to the public. The spirit of understanding and of critical co-operation shown by the various contributors offers an excellent example for other workers in this field.

Major consideration was given to depicting and understanding some of the problems involved. Semantic and cognitive factors were examined. Emotional factors were correctly stressed. Perhaps the psychological professions should inquire more into their motivations for ignoring their responsibility in communicating to the public; writers might wonder why they need so often to distort and sensationalize the material. There may be answers other than the logical commonsense ones. And the emotional difficulties of the public upon getting psychological data are considered. More might be asked of the aims, present and future, in communicating on these matters with the public.

The contributors have largely avoided imitating Dr. Gregg's definition of '. . . a zealot as a person who redoubles his efforts when he has lost sight of his aim'. In this beginning, they have made a refreshing approach by constructively focusing on the problems.

Marvin Brook.

Neuropharmacology. Transactions of the First Conference, May 26, 27 *and* 28, 1954. Edited by Harold A. Abramson. (New York: Josiah Macy Jr. Foundation, 1955. Pp. 210. $4.25.)

This is a record of a conference devoted to the neurophysiology of some emotional changes produced by drugs. Among various problems the physiological concomitants of anxiety produced by injection of certain drugs were studies experimentally, with special reference to cerebral circulation. The changes of electrical activity in relation to anaesthesia were another subject of research. Among the participants in the symposium were psycho-analytically informed neuropsychiatrists and neurophysiologists (Grinker, Gerard, Mirsky). This book testifies to the seriousness with which the multidimensional and interdisciplinary approach is being pursued in the United States. Although symposia such as this have so far achieved no more than to throw into relief the difficulties of a synthesis, they are bound to prove fruitful by improving mutual understanding between all those concerned with research into mental functions.

E. Stengel.

Sexual Behaviour in American Society. An Appraisal of the First Two Kinsey Reports. Edited by Jerome Himelhoch and Sylvia Fleis Fava. (New York: Norton, 1955. Pp. 446. $5.00.)

The Kinsey Reports, whatever their merits and faults, have made a tremendous impact on the lay public and a considerable impression on the experts. This book contains a selection of critical reviews of high standard from the methodological, sociological, psycho-analytical, psychiatric, anthropological, legal and religious points of view. Most of the thirty-eight articles had been published previously in various journals, and the Society for the Study of Social Problems deserves gratitude for presenting them together. The psycho-analytical standpoint is ably expressed by Kubie and Eisenbud. This book is indispensable for everybody who consults the Kinsey Reports.

E. Stengel.